VIENNA SYMPHONIC LIBRARY

vienna ensemble PRO⁵

USER MANUAL 2.81



INTRODUCTION

Welcome to the Vienna Symphonic Library's Vienna Ensemble PRO 5!

Many great improvements and new features have been added to this new version:

Vienna Ensemble PRO 4 offered: 3rd party VST/AU plug-in hosting, full 64 bit support on Windows and OS

X and the PRESERVE function that keeps your samples loaded, be it in your Vienna Instruments / Vienna
Instruments PRO or in any other VST/AU plug-in, while you switch to another project in your sequencer!

And here are the major new features of Vienna Ensemble PRO 5:

- > Full Backward Compatibility with Vienna Ensemble PRO 4
- > Full ITU Surround Support
- > New Surround Balance / Surround Pan Plug-ins
- > Full Plug-in Latency Compensation
- > Audio Input Plug-in
- > Event Input Plug-in (to circumvent AU/VST single MIDI port limitation)
- > Parameter Automation with touch automation, fully mappable
- > Transport Play/Stop button, which is transmitted to the master host as well (Space key). Now you can start and stop your playback from within Vienna Ensemble PRO!
- > Full **Time Information** and **Synchronization** from the master host (SMTP, cycling, time signature, PPQ)
- > Re-arrange and docking/undocking of all windows
- > Ability to **move mixer strips** by dragging (was previously only possible with channel strips)
- > Ability to drag multiple channel or mixer strips at the same time
- > Ability to **undo/redo virtually everything** (including 3rd party plugin parameter changes)
- > VE Pro interface element can be (un)docked and tabbed freely now
- > Ready for Vienna MIR PRO!



NEW FEATURES that were added since 2012 are highlighted in green!

System Requirements

Vienna Ensemble PRO 5 runs on PC Intel Core 2 Duo/AMD Athlon 64 X2 machines with Windows 7, 32 and 64-bit versions, and Intel Core2Duo machines with Mac OS X 10.8 (latest update) or higher. Best of all, you can run the 32-bit version and the 64-bit version of Vienna Ensemble PRO simultaneously, so that you can make use of all your plug-ins!

Network

Vienna Ensemble PRO 5 incorporates the first all-in-one MIDI and audio LAN solution that works universally on Macs and PCs. You need a **working Gigabit connection** and at least one USB eLicenser like our **ViennaKey**, and neither audio nor MIDI Interface is needed on your Slave Computer!

You can easily load your previously saved Vienna Ensemble (PRO) templates (*.viframes), and you can even merge existing Vienna Ensemble (PRO) projects!

You should use static IP addresses, and avoid 169.x.x.x addresses (these are automatically assigned by your computer and tend to change). A classical stable setup looks like this:

Manually assign one of these IP addresses to the computers in your setup: 192.168.0.x or 10.0.0.x, and assign a subnet mask of 255.255.255.0. If you are working with a router, you should add the IP address of the router (e.g., 192.168.0.1).

Epic Orchestra

Epic Orchestra consists of a hand-picked selection of instruments and articulations from our famous Vienna Instruments Collections. You will get a good impression of the possibilities that are available in virtual orchestration when working with Vienna Symphonic Library products. Vienna Ensemble PRO also comes with customized channel strip presets for **Epic Orchestra** that work especially well in combination with our audio processing plug-ins in **Vienna Suite** (check out the free demo license right away!). Load the **Epic Orchestra** Demo project provided in your MyVSL (Tutorials/Templates), and you get a perfect, well-balanced mix with default channel settings for Epic Orchestra!

A <u>quick introduction to Vienna Instruments (PRO)</u> can be found later in this manual (page 67). Please check out the dedicated **Vienna Instruments / Vienna Instruments PRO Manual** in <u>MyVSL</u> and the **Video Tutorials**.



To use *Epic Orchestra*, you need to install the <u>Vienna Instruments and Vienna Ensemble</u>
<u>Sample Player Software</u> (click "Software Installers").

Video Tutorials

As with all our software products, you can find many video tutorials showing the different features discussed in this manual – watch them at the <u>Software Area!</u>

Registration

When **purchasing online**, you are automatically provided with **3 licenses** and we will send you **3 Activation Codes** to download your licenses.

You can use the networking features on **up to 4 computers** (your Master Computer and 3 Vienna Ensemble PRO Slave Computers).

If you intend to use Vienna Ensemble PRO 5 itself on your Master Computer as well, you will need one license for your Master Computer.

Epic Orchestra comes with 1 license.



If you purchased Vienna Ensemble PRO 5 with our Software Package Stick or received a serial number certificate with your order, please register your Vienna Ensemble PRO 5 and Epic Orchestra at www.vsl.co.at, and you will receive your Activation Codes immediately via email.

Upgrading from Vienna Ensemble PRO 4

As Vienna Ensemble PRO 5 is fully backward-compatible with version 4, you can load your existing projects and keep working on your music right after installation.



If you have registered Vienna Ensemble PRO 4 already, you will receive Activation Codes to download upgrade licenses that will transform your existing Vienna Ensemble Pro 4 licenses into Vienna Ensemble PRO 5 licenses.

eLicenser Control Center

The eLicenser Control Center manages your licenses. Please make sure that you are using the latest version, available at www.elicenser.net.

Remember that you need a **ViennaKey** (or a Steinberg or Arturia eLicenser) to store your licenses on. You can **register your key** with us, so that you are safe in case of damage (the first 6 or 7 digits of the key are important, as shown on the screenshot).

Downloading your license is simple: Make sure your ViennaKey is inserted, launch eLicenser Control Center, click on **Enter Activation Code** and paste your Activation Code into the respective field. You will be guided through the rest of the procedure.

An Internet connection has to be available for this process. You can of course download your license on any Internet computer, in case your music computer is not connected to the Internet.



If your license download was interrupted for any reason, please click **Maintenance** (in the upper right corner) – this will complete your license download automatically!



Please remember that you will need the content and the licenses of the given Vienna Instruments Collections (if you are a Vienna Instruments user) as well as the Vienna Ensemble PRO software installed alongside with a ViennaKey on your computers!

CONTENTS

Introduction	2
System Requirements	3
Network	3
Epic Orchestra	
Video Tutorials	
Registration	
Upgrading from Vienna Ensemble PRO 4	4
eLicenser Control Center	5
Setup	8
1 Computer Setup	
Multi Computer Setup:	8
Quick Start	9
Vienna Ensemble PRO Installed Files	10
Vienna Ensemble PRO Server	11
Server Preferences	12
General Preferences	12
Instances Preferences:	13
External MIDI Preferences:	14
A Note on Multiprocessing	15
Vienna Ensemble PRO Server Interface	
General Information (Stereo)	
VE PRO Server Interface and ITU Surround Support	
Vienna Ensemble PRO Audio Input Plug-in	
Vienna Ensemble PRO Event Input Plug-in	
Latency Settings	
Migrating from Vienna Ensemble	25
Vienna Ensemble PRO 5 Overview	26
64-bit and 32-bit support	26
File Formats and information display	26
Navigation / The Mixer	29
Re-arranging Windows	31
Channel Options	32
Post Effect Plug-in Rack	
Vienna Surround Pan / Surround Balance Plug-ins	35
Vienna Ensemble PRO Matrix Mixer	36
Preserve, Decouple, Connect and Disconnect - An Overview	38
Preserve	38
DECOUPLE	
FORCE DISCONNECT	42

Important Notes For Logic Users	43
Logic's "Live" mode	43
Automation	44
Multiple MIDI Ports in Logic PRO X - a different approach	45
Setup	
Parameter Automation in the Multiport Template	48
IMPORTANT NOTES FOR DIGITAL PERFORMER USERS	49
Audio Plug-ins Preferences	
New Options with MAS Plug-ins	50
Quick Guide - Migration to MAS	50
Working with Audio Input / Event Input plug-ins	52
Merging existing VE PRO projects (*.viframe files)	53
Vienna Ensemble PRO 5 and Sibelius	54
Channel Overview	55
MIDI Ports	55
Plug-in effects	56
Parameter Automation	57
Power panning/Secondary FX Rack	58
Outputs	59
Multi-timbral plug-ins in Vienna Ensemble PRO	60
Vienna Ensemble PRO Stand-alone	61
Preferences	
Shortcuts and Special Features	65
Shortcut List for Windows	
Shortcut List for OS X	65
Special Features Channel Pane	66
Special Features Mixer	66
Vienna Instruments (PRO)	67
Vienna Ensemble PRO Routing	68
Logic 9 / Logic X	68
Digital Performer	72
Pro Tools	80
Cubase	85
Cakewalk SONAR X3	90
Presonus Studio One	96
Glossary	102
Support, Questions, Videos, Forum	103

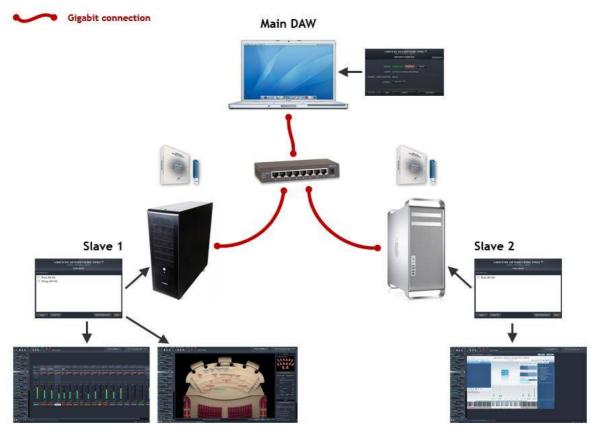
SETUP

1 Computer Setup

Of course this is the easiest way to use Vienna Ensemble PRO. Simply install the software, make sure your **ViennaKey** with the Vienna Ensemble PRO license is connected – done!

Multi Computer Setup:

A typical Vienna Ensemble PRO multi computer setup will look like this:



Each Vienna Ensemble PRO Slave machine needs to have a ViennaKey containing the licenses for the given Vienna Instruments Collections (Epic Orchestra on one computer) and the Vienna Ensemble PRO license connected. You will also need the content of your Vienna Instruments Collections available and assigned in your Directory Manager (described in your Vienna Instruments Manual)!

On a Mac, unzip the **Vienna Ensemble PRO OS X installer** and run the installation. After accepting the license agreement, you will be asked for a destination folder.

On PC, run the **Vienna Ensemble PRO WIN installer**. You will also be asked for the location of your sequencer's **VST plug-in folder**. You can specify another directory for the plug-in, but it should remain within the sequencer's plug-in path.

Used network ports: 6472, 6473, 6474, 6475, 6476, 6477

Attention: Please make sure that the same version of Vienna Ensemble PRO is used on all computers in your network!

Quick Start

Please make sure that a **ViennaKey** with a Vienna Ensemble PRO 5 license (or demo license) is connected to your master computer. Then

- 1) Launch Vienna Ensemble Pro Server or Vienna Ensemble Pro Server (64-bit)
- 2) In your sequencer, insert Vienna Ensemble Pro as a VST/VST3/AU/RTAS/AAX/MAS instrument
- 3) The Server Interface will open. Click Connect and choose 127.0.0.1 localhost [32] (NEW) or 127.0.0.1 localhost [64] (NEW)
- 4) A new instance of Vienna Ensemble PRO appears and you can start exploring right away.

To connect to a Vienna Ensemble PRO Server on a slave computer over LAN, connect your ViennaKey to your slave computer and start the Vienna Ensemble Pro Server or Vienna Ensemble Pro Server (64-bit) – then proceed with step 2 from above. You will see the IP address of your slave computer instead of 127.0.0.1, if your network connection works.

The components of this flexible software are described in detail on the following pages.

Vienna Ensemble PRO Installed Files

The latest version of Vienna Ensemble PRO is available in your MyVSL.

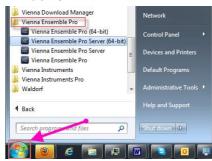
To use *Epic Orchestra*, you need to install the <u>Vienna Instruments and Vienna Ensemble Sample Player Software.</u>

Once installed, the new Vienna Ensemble PRO folder will appear in your programs/applications.

OS X:



Windows:



This folder contains the following programs:

Uninstall Vienna Ensemble Pro (OS X only): Helpful if you want to roll back to an earlier version.

Vienna Ensemble Pro: Stand-alone 32-bit software

Vienna Ensemble Pro (64-bit): Stand-alone 64-bit software

Vienna Ensemble Pro Server: Connect to this 32-bit server from within your sequencer (see next page). This is the key when you are working over network.

Vienna Ensemble Pro Server (64-bit): Connect to this 64-bit server from within your sequencer (see next page). This is the key when you are working over network.



Vienna Instruments and Vienna Instruments PRO need to be installed separately to be available in Vienna Ensemble PRO 5.

VIENNA ENSEMBLE PRO SERVER

The **Vienna Ensemble PRO Server** is a separate application that runs in the background on your **Vienna Ensemble PRO** Slave Computer or alongside your sequencer.

Start the **Vienna Ensemble PRO Server** on all computers used before you open your sequencer. You can adapt your plug-in settings and shut down all running instances of Vienna Ensemble PRO in the menu of the Vienna Ensemble PRO Server.

There are 2 ways to add a new Vienna Ensemble PRO Stereo instance.

1) You can **ADD** a new preserved **instance** of **Vienna Ensemble PRO** – with a name that gives you an overview right away and also shows up in the Vienna Ensemble PRO GUI (you can see it next to the activated **PRESERVE** icon – more about this feature later).



2) Or you can **ADD** a **new instance** from the **Vienna Ensemble PRO Server Interface** within your sequencer (See "Quick Start" above.)



Server Preferences

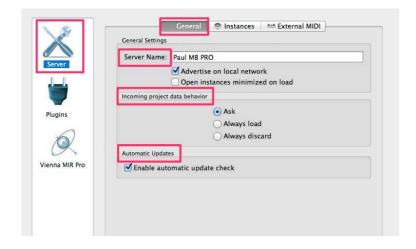
General Preferences

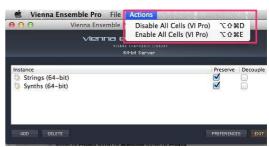
You can name your computer in the **General** Preferences of the **Vienna Ensemble PRO Server** to keep the overview.



Advertise on local network needs to be active to make your Vienna Ensemble Slave visible for other computers in your network. You can also choose to **open instances minimized on load** (this only applies when loading a Metaframe).

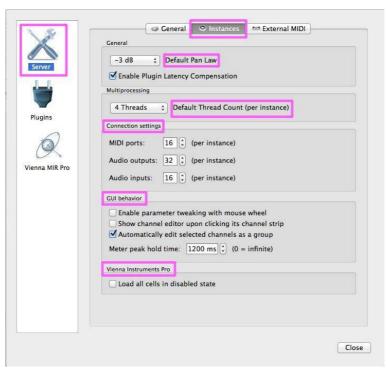
The **Incoming project data behavior** refers to how project data that has been stored with your song (and is pushed to your Vienna Ensemble PRO by your sequencer) is handled. Default: Ask.





- You can also enable and disable the **automatic update check** in the General Preferences.
- Vienna Ensemble PRO Server Actions lets you Disable/Enable All Cells of all loaded Vienna
 Instruments PRO instances in the selected VE PRO Server. The focus needs to be on the Vienna
 Ensemble PRO SERVER (NOT seperate instances)!

Instances Preferences:



Set the **Default Pan Law** for all new instances here. You can also **enable/disable Plug-in Latency Compensation**.

You may change the number of used threads in the **Multiprocessing** drop-down menu in real-time, and each Vienna Ensemble PRO instance will use the specified number of process threads. So 1 instance on an 8-core computer should use 8 threads, 2 instances should use 4 threads, and so forth. Ideally you should have as few threads as possible while still using all your cores. If you're also running your host sequencer on the same system as the running instances, it might be wise to reserve a core for it.

To keep it simple, set the amount of threads to your amount of cores. If you run into performance issues, lower the amount of threads.

You can change the number of used MIDI Ports and **Audio outputs** per instance, just as your **Audio inputs**. If you want to use a multi-timbral instrument with 16 stereo voices, please make sure to set the number of audio ports to 32. **Audio Units** by design do not offer more than 1 MIDI Port per instance.

Please find more about the new <u>workaround for this AU/VST limitation</u> (page 22).

For Logic, there is <u>a special workaround available, involving the Environment</u> (page Error! Bookmark not defined.).

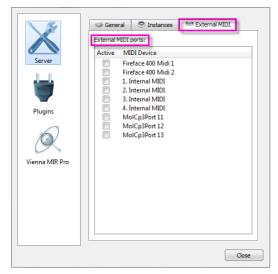
GUI Behaviour lets you optimize some basic settings for your workflow.



Enable parameter tweaking with mouse wheel: Disabling this feature will avoid changing any settings when using the mouse wheel to scroll through the GUI.

- Show channel editor when clicking its channel strip: When disabled, the channel strips behave like mixer strips in terms of showing the editor. So rather than having the instrument editor automatically showing when clicking a channel strip, you need a double click on the colored label explicitly to show the editor.
- Automatically edit selected channels as a group: When activated, all selected channels will respond to changes like volume changes as a selection group. Use "Alt" to edit a single track within a selection. More information can be found here!
- The **Meter Peak Hold Time** can also be adjusted here. Default Value = 1200 ms
- If you are using Vienna Instruments PRO, you'll find the option to load all cells in disabled state very useful with bigger templates, especially in combination with Enable Cells on MIDI Activity, a feature that can be activated in the General Settings of Vienna Instruments PRO.

External MIDI Preferences:



changes.

You can also administrate your **External MIDI Ports** in the Server Preferences, but this is an **experimental feature** at this point and it is strongly suggested to use the internal MIDI channels. If you want to use Vienna Ensemble PRO on your Master Computer, you need to start the **Vienna Ensemble PRO Server** (32 bit or/and 64 bit) on the Master Computer.

Then connect Vienna Ensemble PRO to the Vienna Ensemble PRO instance that is displayed as "localhost" in the **Server Interface** that appears after you insert Vienna Ensemble PRO as a plug-in in your sequencer (see next chapter).

All available Plug-ins are listed in the **Plugins** Section of the Server Preferences, on **Windows** systems, you may also set your VST Settings here.

Some plug-in hosts may require a rescan/revalidation of the Vienna Ensemble PRO plug-in to apply any MIDI/audio port

ATTENTION: It is essential to have the same Audio and MIDI preferences and the same version of Vienna Ensemble PRO on all computers in your network!

A Note on Multiprocessing

There are some general guidelines to follow when using **Vienna Ensemble PRO** on a system with multiple cores. The general rule to follow is that the optimal number of threads on a system should be equal to the number of virtual cores present.

Vienna Ensemble PRO, like most other hosts today, offers multi-threading. This means that it runs instruments and plug-ins in parallel using several different threads, which allows to utilize several cores on the system. **Vienna Ensemble Pro Server** will generally perform best when running as *few instances as possible*. With the **VST3 / RTAS /AAX / MAS Server Interface** plug-in, this is possible to achieve by increasing the number of midi ports per instance (see below). Using the AU or VST2 plugins, you might be required to run several instances to work around the 16-MIDI-channel limitation of these standards (see <u>Event Input Plug-in</u> and <u>Logic specific notes</u> for workarounds).

If you are running a sequencer on the same machine as **Vienna Ensemble PRO**, you could lower the number of threads for **Vienna Ensemble PRO**, to represent the estimated load of **Vienna Ensemble PRO** versus the load of your sequencer. In a system with 8 virtual cores and an estimated even load between sequencer and **Vienna Ensemble PRO**, a good starting point would be to set **Vienna Ensemble PRO** to 4 threads (if running a single instance).

When running more than one instance of **Vienna Ensemble PRO**, the number of threads per instance should be lowered accordingly. Certain plugins, such as Native Instruments **Kontakt**, also offer the possibility of multithreading, which may complicate things further.

If using **Vienna Ensemble PRO** to host such a multi-timbral plug-in exclusively in one instance, it might give better performance to turn on multi-processing in Kontakt while keeping a low thread count (1-2) for **Vienna Ensemble PRO**.

Vienna Ensemble PRO Server Interface

General Information (Stereo)

Vienna Ensemble PRO Server Interface is a plug-in that communicates with the **Vienna Ensemble PRO Server**, be it on your Master Computer or on your Slave Computer(s).

Instantiating the Vienna Ensemble PRO as a plug-in in your sequencer opens the **Vienna Ensemble PRO Server Interface**:



If you click on **Connect**, the Server Interface will show all available Slave Computers – IF you have started the **Vienna Ensemble PRO Server** on the given computers!



Each Server Interface can connect to one instance of Vienna Ensemble PRO, and of course you can utilize multiple Server Interfaces and instances!

We have launched 1 64-bit Vienna Ensemble PRO Server with 2 preserved instances on the Master Computer (127.0.0.1, 64-bit is indicated by [64], see below). "192.168.0.190 Slave 1" is the slave computer with 1 preserved instance (Epic Orchestra). Select the Slave Computer of your choice and you will see the IP Address below **Slave Hostname** and the name of the **Preserved Instance**.



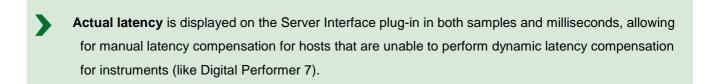
Click **Connect** or double-click the instance of your choice and the Vienna Ensemble PRO Server Interface will show which computer you are connected to. If you click on ... **(NEW)**, a **new unpreserved instance** of Vienna Ensemble PRO will be instantiated, instead of connecting to an existing preserved instance.

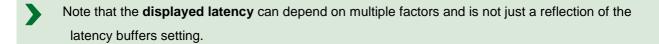
The **Server Architecture** shows whether you are connecting to a 32-bit or 64-bit instance of Vienna Ensemble PRO. Select the Slave Computer of your choice and you will see the IP Address below Slave Hostname and the name of the Preserved Instance.

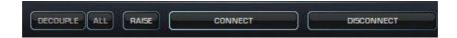


Vienna Ensemble PRO 5 lets you **Preserve** and **Rename** the connected instance directly from within the Server Interface Plug-in.

Additionally, you can set the **Preferences per instance** (Audio Outputs, MIDI Inputs, Audio Inputs). Note that these Preferences are system wide settings that will not be saved with your project.







Activating **DECOUPLE** prevents the saving or loading of the connected instance's project data when the master host saves or loads (the Vienna Ensemble PRO instance needs to be **preserved** first!).

This can speed up the workflow a lot when using 3rd party plug-ins like Native Instruments' Kontakt. In other words: **Decoupled**, the Vienna Ensemble PRO Server Interface only saves the connection information (the slave it is connected to and, if applicable, the preserved instance).

ALL overrides the **DECOUPLE** buttons for all Vienna Ensemble PRO plug-ins in the master host.

RAISE brings the connected Vienna Ensemble PRO instance's window to the front.

Coupled, the Vienna Ensemble PRO Server Interface saves the connection information AND the connected instance's project data. For more information, please refer to the chapter **Preserve**, **Decouple**, **Connect and Disconnect – An Overview**.

VE PRO Server Interface and ITU Surround Support

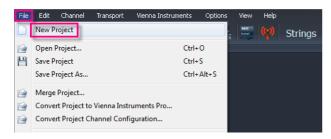
If you'd like to take advantage of the **Full ITU Surround Support** of Vienna Ensemble PRO 5, you can define the channel configuration per Vienna Ensemble PRO instance.

Channel configuration is chosen by either:

A) Creating a new instance from a **Server Interface** plug-in. The channel configuration will be adapted from the channel configuration of the plug-in.



B) Starting a new project from a disconnected preserved instance.





A **Vienna Ensemble Pro Surround** plug-in is available in hosts which do not allow to set a plug-ins channel configuration before the instantiation of the Plug-in (e.g., Cubase, where you insert Vienna Ensemble PRO as surround plug-in and choose the channel configuration in the Server Interface, see below).

The Surround Configuration that the Vienna Ensemble Pro Surround plug-in should use can be set in its **Preferences**:







ATTENTION: It is not possible to connect a Server Interface Plug-in to a Vienna Ensemble PRO instance with a different channel configuration!

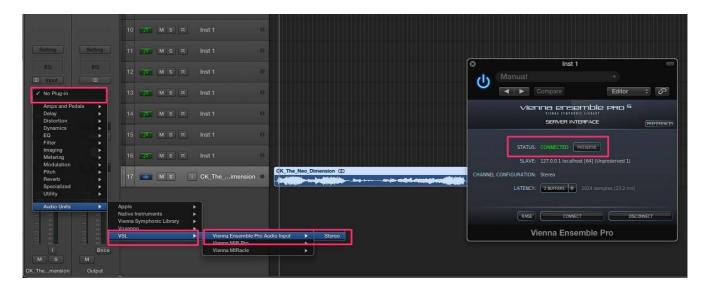
Vienna Ensemble PRO Audio Input Plug-in

The Audio Input Plug-in is a stereo effect plug-in.

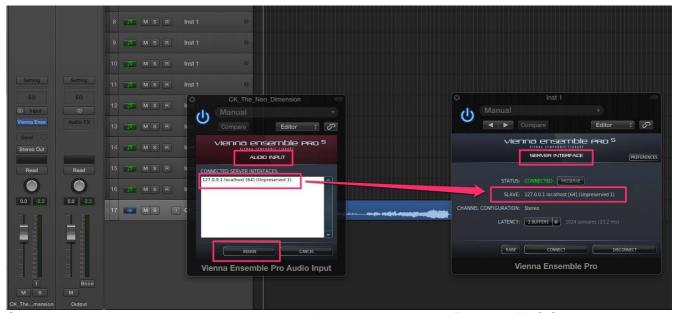
Assignable to a connected Server Interface plug-in, it sends audio to one of the available stereo audio input buses in the connected Vienna Ensemble Pro Server instance, where the audio can be processed. This makes *Vienna Ensemble PRO* a great virtual FX rack on your slave computer as well, because all latency is automatically compensated!

Make sure that a connection to the Vienna Ensemble PRO Server already exists in your song!

Create a **Vienna Ensemble Pro Audio Input** plug-in as an **effect plug-in** in a stereo track in your sequencer:



You will be asked to assign your Audio Input plug-in to an existing Server Interface:



Choose the audio channel you want to pipe your audio signal to the Vienna Ensemble PRO Server.



ATTENTION: In **LOGIC**, always insert a bypassed I/O Utility plug-in in any channel you are using Vienna Ensemble PRO Input plug-ins AND the main Vienna Ensemble PRO Server Interface plug-in on. More information in the <u>Logic specific notes</u> (page 22).

Now, create a new audio input channel in the assigned Vienna Ensemble PRO instance (lower left corner):





Assign the **corresponding input channel** in the newly created Audio Input Channel in Vienna Ensemble PRO and Audio will be sent directly to your Input channel, where you can process it any way you like, without any latency issues.

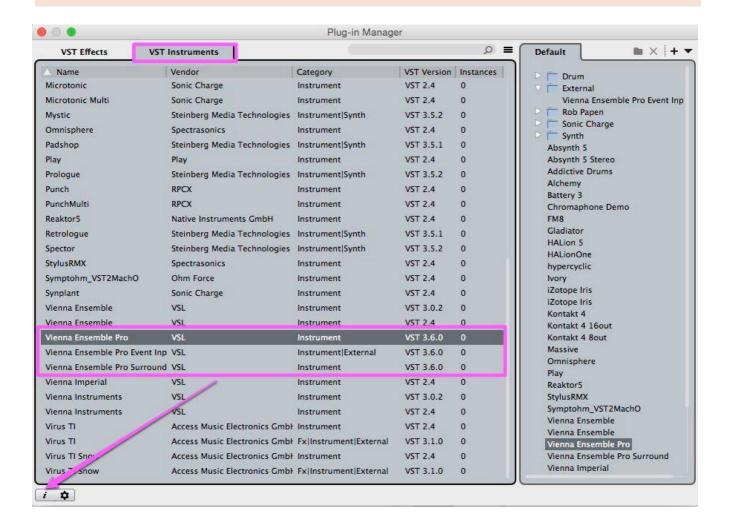
The output routing in Vienna Ensemble PRO is just as flexible as with any other instrument.

There was quite some change to the **CUBASE** threading model since **Cubase 7**. This causes issues with a variety of plugins. Audio Input behaves very badly due to this change. For now, we do not recommend using Audio Input Channels with Cubase 7 or Cubase 7.5.

In Cubase 8, you can deactivate ASIO GUARD 2 manually:

[Menu] > Devices > Plug-in Manager > VST Instruments > Vienna Ensemble Pro > Click "i" for Plug-in information > Click to set ASIO Guard to Inactive.

Please perform this operation on *ALL* VEPro Instrument and Fx plugins. Audio Input plugins will work properly thereafter.



Vienna Ensemble PRO Event Input Plug-in

The Event Input Plug-in is inserted as virtual instrument into your sequencer. You will most likely use it as a multi-timbral virtual instrument (with multiple MIDI Channels).

This additional plug-in is only useful if you are using Vienna Ensemble PRO 5 as a VST or AU Plug-in. You will not need it if you are using VST3 or RTAS.

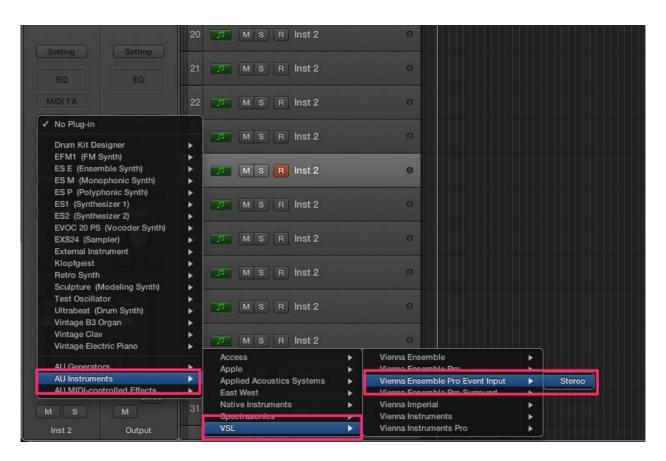
The Event Input plug-in serves two causes for AU / VST users:

1) To add more MIDI input ports (1 Event Input plug-in adds 16 MIDI channels)

Assignable to a Server Interface plug-in, it sends MIDI to one of the available MIDI input ports in the connected Vienna Ensemble PRO Server instance, which circumvents the single MIDI port limitation of AU and VST.

2) In Logic: To use parameter automation when using Audio/Event Input plug-ins. More information in the Logic-specific notes (page 43).

To create "additional MIDI ports" in, e.g., **Logic**, insert a "Vienna Ensemble PRO Event Input" plug-in in a newly created (multi-timbral) software instrument.



This will open the **Event Input Plug-in**.

Assign the plug-in to a VE PRO instance.





By choosing a MIDI INPUT, you open a new MIDI Port with 16 MIDI Channels that this MIDI Event Plug-in takes care of.



One of the available Event Input plug-ins can take care of the **automation data** you want to send/receive. You can choose which one of the available Event Input Plug-ins will do the job.

In Logic, some additional steps have to be taken into account.



The Input plug-ins never produce any audio output.



As soon as one or more Input plug-ins are assigned to a connected Server Interface plug-in, an extra buffer of latency is added to the output of the Server Interface plug-in. Due to dynamic latency compensation, this does not affect the playback latency!

Latency Settings

In the **Vienna Ensemble PRO Server Interface** you will also find the **Latency** settings. This value ONLY affects the latency added over network when you are playing live.



The Vienna Ensemble PRO Server Interface plug-in automatically compensates the latency in playback – even if you have set the Latency to different settings for different instances of Vienna Ensemble PRO.

We have applied dynamic latency compensation to Vienna Ensemble PRO. This means that your sequencer will automatically adapt to the chosen buffer settings of your Vienna Ensemble PRO Server Interface plug-in.



ATTENTION PRO TOOLS USERS: RTAS does not support real-time dynamic latency compensation at the moment; the plug-in has to be reloaded for changes to become effective. Disabling Delay Compensation and enabling it again is also known to work.



Setting the **Latency** to "**none**" will synchronize Vienna Ensemble PRO with your soundcard, so that no latency is added – while very good for recording percussive sounds, this also adds a lot of strain to the CPU. Setting the **Latency** to "**1 buffer**" will add one buffer to your soundcard latency. If your soundcard latency is, e.g., 256 Samples, your latency when playing live will be 512 samples.

Setting the **Latency** to "**2 buffers**" will add 2 buffers to your soundcard latency. If your soundcard latency is, e.g., 256 Samples, your latency when playing live will be 768 samples.

And so forth ...

Generally speaking: The faster your CPU and the better your soundcard, the more you can expect from your system!

Migrating from Vienna Ensemble

Upgrading from *Vienna Ensemble* to *Vienna Ensemble PRO* is now easier than ever! There are **2 ways to migrate from Vienna Ensemble**:

- 1) Save your Vienna Ensemble projects (*.viframe files) and open them in Vienna Ensemble Pro. If you want to merge projects, use the "Merge Project" feature in the "File" menu. It is advised to check the assignments of outputs after merging projects.
- 2) Before you upgrade, please make sure to use the latest available version of Vienna Ensemble. Then download the latest available version of Vienna Ensemble PRO. Find all updates in your MyVSL.

 Once you have downloaded and installed Vienna Ensemble PRO, please start the Vienna Ensemble PRO Server (32-bit and/or 64-bit), then load the master host project in your sequencer. This will connect all Vienna Ensemble plug-ins to the Vienna Ensemble PRO Server(s), allowing you to take advantage of all Vienna Ensemble PRO features.

Click Preserve on all new **Vienna Ensemble PRO** instances (name them as you like) and replace the **Vienna Ensemble Server Interface** plug-ins in your sequencer with **Vienna Ensemble PRO Server Interface plug-ins**, then connect to the preserved instances – and don't forget to save your song, best with a new version number!

Vienna Ensemble PRO exclusive features like 3rd party virtual instruments will not be loadable in Vienna Ensemble, which is why it's important to replace the Vienna Ensemble plug-ins with Vienna Ensemble PRO plug-ins!

In short words:

- Update all VSL software
- Start the Vienna Ensemble PRO Servers (32-bit and/or 64-bit)
- · Load your master host project in your sequencer
- Preserve all opened Vienna Ensemble PRO instances
- Replace all Vienna Ensemble Plug-ins in your sequencer with Vienna Ensemble PRO plug-ins and connect to the preserved instances.
- Save your master host project in your sequencer (new version number or name).

VIENNA ENSEMBLE PRO 5 OVERVIEW

64-bit and 32-bit support

Vienna Ensemble Pro supports hosting of 32-bit VSTi/AU plug-ins in a 32-bit server and hosting of 64-bit VSTi/AU plug-ins in a 64-bit server. If you do not see your plug-ins, you should check if you are running the right version of Vienna Ensemble PRO.

You may run Vienna Ensemble PRO 32-bit and 64-bit instances (as a stand-alone or as a server) side by side. This way you can host old "legacy" 32-bit plug-ins in a 32-bit Vienna Ensemble PRO, while hosting Vienna instruments, Vienna Imperial, Vienna Suite, as well as any other 64-bit capable VST/AU instruments and effects in your 64-bit Vienna Ensemble PRO.

The most obvious advantage of 64-bit plug-ins when it comes to RAM-intensive applications is of course that you can utilize as much RAM as available in your 64-bit OS.

File Formats and information display

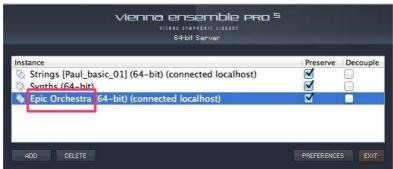
You can save separate **Vienna Ensemble PRO Projects** using the file menu or the icon in the task bar. The saved files are called ***.viframe32** and ***.viframe64**, depending on the version (32/64 bit) of the Vienna Ensemble PRO Server. They contain all information saved in a single Vienna Ensemble PRO instance!



When loading a *.viframe, the file name will be displayed in [], amongst other information 1) in your **Vienna Ensemble PRO Instance Window Title** (in this case: "Epic Orchestra"):



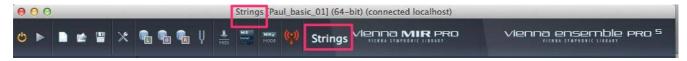
2) and in the Vienna Ensemble PRO Server Window



A **Vienna Ensemble PRO Instance** is represented by one "plug" icon (connected or disconnected) and the description in a Vienna Ensemble PRO Server (be it saved or unsaved, preserved or unpreserved, decoupled or coupled).

If you **preserve** this instance and name it, e.g., "Strings", this name will be displayed in 3 windows.

(1) The Vienna Ensemble PRO Instance Window Title:



(2) The Vienna Ensemble PRO Server Window:



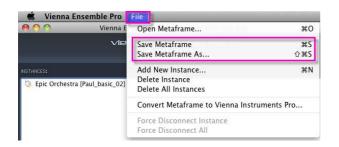
(3) And the **Server Interface** in your sequencer:

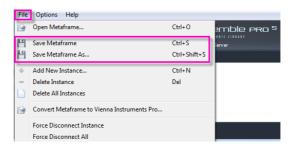


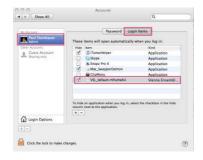
With **preserved instances**, the *Vienna Ensemble PRO* Server will always display the connection status, the name of the preserved instance, the name of the project (*.viframe32/64) and the name of the master computer the *Vienna Ensemble PRO* Server is connected to (in this case it's the same computer).

Once you have set up your system with **more than one instance** of *Vienna Ensemble PRO*, you can save a **Metaframe** of your templates. Use the **File** menu of your **Vienna Ensemble PRO Server**. Your files will be called *.mframe32 or *.mframe 64, depending on the version of the *Vienna Ensemble PRO* Server (32/64 bit) you are using.

The name of the used **Metaframe** will be displayed in the **Vienna Ensemble PRO Server** Window Title. A **Metaframe** is a group of *Vienna Ensemble PRO* instances saved together. It contains the complete information of all opened *Vienna Ensemble PRO* instances on the given **Vienna Ensemble PRO Server**. **OS X: Windows:**







In Windows, you can place your favorite default metaframe in your **startup** folder (in OS X, it's the **Login Items** defined in your "Accounts"), so that all samples and settings will be loaded up when you come back from your morning coffee!

NAVIGATION / THE MIXER

The **Vienna Ensemble PRO** GUI will open in the background of your sequencer or on your Slave Computer. Hover with your mouse over each icon and you will see a description in the lower left corner, as well as a "mouse-over" description (with the corresponding shortcut, if available)!



The taskbar in the upper left corner contains the following icons:



- 1) Start/Stop Engine
- 2) Start/Stop Transport
- 3) **New Project**: Create a new project from scratch
- 4) **Open Project**: Open your saved projects: *.viframe32 or *.viframe64
- 5) Save Project: Save your projects as *viframe32 or *.viframe64 files
- 6) Preferences
- 7, 8, 9) **Learn, Optimize, Reset** now you can optimize ALL Vienna Instruments instances of a whole **Vienna Ensemble PRO** project at once!
- 10) Master Tuning: Changes the tuning of all inserted Vienna Instruments
- 11) **MIDI Activity Focus**: Will automatically switch to the channel that has been solo´d in your sequencer, or the only channel that is receiving MIDI signals at any given time. This convenient feature works with 1 MIDI Channel only, by design.
- 12) **Auto-Add MIR PRO** will automatically add MIR PRO to each new channel (only visible if a MIR PRO license is available).
- 13) MIRx Mode opens MIRx Settings
- 14) **Preserve** disconnects your **Vienna Ensemble PRO** instance from your sequencer, keeping all the samples loaded. More about this later.

In the lower left corner, you can add Vienna Instruments PRO and Vienna Instruments instances, virtual instrument plug-ins (AU/VST), audio input channels and busses. You can delete selected channels and toggle the narrow channel strip view on and off for the left channel pane.



In the lower right corner, you will find some more information available all the time. Channel Configuration, Tempo (BPM), Plug-in Latency Compensation (in samples), CPU Meter.

Note: Plug-in Latency Compensation can be disabled in Preferences.



By default, Bus channels are green, Vienna Instruments channels are blue, VSTi/AU plug-in channels are brown(ish) and Audio Input Channels are purple.

Move channels in the Channel Pane or Mixer according to your preferences.

You can collapse single channels (in the mixer) and expand and collapse all channels by holding down SHIFT:



It is possible to undock the Mixer, the Channel Pane, the interfaces of all virtual instruments and MIR PRO (if available) to use these windows in a separate window (or on a second screen).

Re-arranging Windows

To **undock a window**, double-click its title bar or click the small undock button in the upper right corner. To **dock an undocked window again**, double-click its title bar.

To **re-arrange a docked window** (like shown below), simply click and drag its title bar over the main window. Indicators will be displayed when you're placing the window over a valid location on the main window.

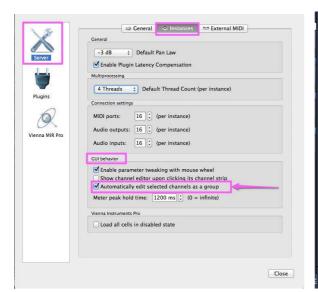
The Instrument window offers the option to unsnap individual instruments.

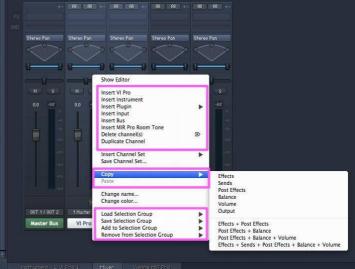
The big "unsnap" button in that window lifts that particular instrument's User Interface out of the shared area and makes it a free floating window.



Channel Options

Right-click on the channel you want to change and you have the following options: **duplicate channels**, **copy specific channel settings**, or **save and insert Channel Sets** (all settings and loaded samples on selected channels) and **save and load Selection Groups**. You can **copy and paste specific parameters** of each channel, and you can also **define the color and name of selected channels**.





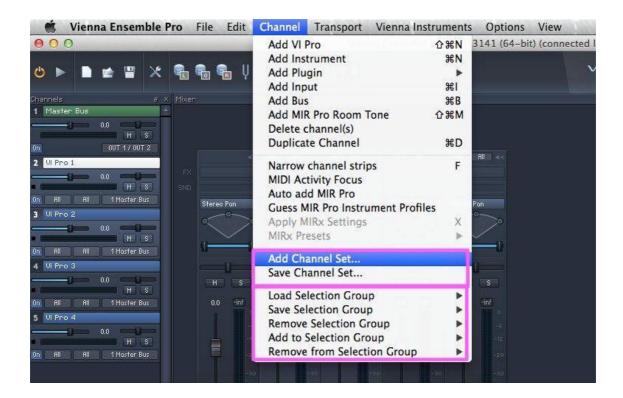
We have introduced **Selection Groups** with Vienna Ensemble Pro 5, which provide a means to recall a selection of channels. Select multiple channels and right-click, Save Selection Group. You can load an existing Selection Group by right-clicking in the empty space around the channels, **Load Selection Group**, or load through the channel context menu.

You can easily manipulate all selected channels by holding down "ALT" when the selection group is selected. This works with channel features exclusively, plug-ins and sends are not affected.

Note: Selection Groups are saved together with the Vienna Ensemble PRO project (*.viframe*).

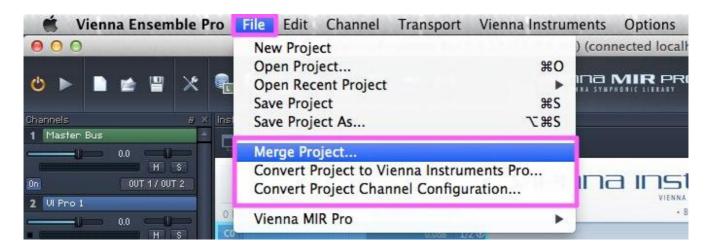
- As described earlier, you can activate the option to **Automatically edit selected channels as a selection group** in the **Vienna Ensemble PRO SERVER Preferences (see above):** When activated, selected channels and MIR PRO plug-ins will behave like selection groups, without the need to hold "Alt".
- Use "Alt" to edit a single track while all other tracks stay selected. Normal behavior can be achieved by holding Alt, so it effectively reverses the functionality of the Alt modifier for grouping.

All channel context options can also be found in the menu bar.



All **MIR PRO** options in the screenshot above are of course only available if a MIR PRO license is present, and are described in the separate MIR PRO manual.

Merging existing projects (of course also from older Vienna Ensemble templates) and **converting a project** (that contains original Vienna Instruments instances) **to Vienna Instruments PRO** is possible as well. These options can be found in the "File" menu of each Vienna Ensemble PRO instance:



With *Vienna Ensemble PRO* 5, you can also **convert a project to a different channel configuration**. This is a very useful option to convert a Stereo project to any Surround configuration: Simply load your project using this conversion option.

We have also added the option to **set a pan law** (both a default setting and a per project setting), which applies to all included panning plug-ins.

And you can also set threads preference per project now:





Post Effect Plug-in Rack

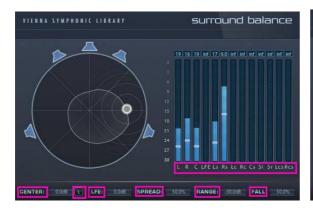
The default stereo power-pan has been transformed into a "post effect" plug-in rack. All plug-ins in this post effect rack are processed after the pre-fader sends.



Right-click the slot to replace the inserted plug-in (see above). **Double-click the slot** to open the Plug-in GUI for more exact placement. You can also **drag additional plug-ins** into this effect rack.

Vienna Surround Pan / Surround Balance Plug-ins

Integrated plug-ins for balancing from surround to surround (Vienna Surround Balance) and panning from mono/stereo to surround (Vienna Surround Pan) are available inside VE Pro (see above).





Possible Operations

Drag the dot(s) to achieve balancing/panning between the available speakers.

Hold "Shift" to only alter the angle of a dot.

Hold "Ctrl" to reset the dots.

Controls:

Center: Controls the level of the Center channel (if available)

Center Link (L): When enabled, include Center channel in balancing/panning

LFE: Controls the level of the LFE channel (if available)

Spread: Controls the spreading between speakers of the balancing/panning

Range: Controls the dB range of the Jellyfish level meter

Fall: Controls the falloff of the Jellyfish level meter

Additionally, each speaker can be enabled/disabled by clicking its icon on the circle.

Vienna Ensemble PRO Matrix Mixer

The Matrix Mixer features a gain, delay and phase network which allows you to solve a variety of problems, for example:

- · Feeding Left/Right channel into LFE channel
- · Phase adjustment of a single channel in a surround setup
- Delay individual channels in a surround setup
- Solving phase problems of individual channels

The Matrix Mixer offers two different modes of adjustment, *Gain* and *Delay*. In the **Gain Mode**, The matrix displays gain settings for each source - destination channel feed. The left column represent inputs, and the top row represent outputs.



Gain adjustment: Adjust gain for each feed by click-dragging on the node. Double-click on a node to enter a value from the keyboard.

Phase reverse: By right-clicking on a node, this node will be phase reversed. A node with active phase-reversal is marked with an orange ring. You may for instance send a phase-reversed feed of the left channel to the right surround channel, and a phase-reversed feed from the right channel to the left surround channel, to create certain effects, or "pseudo-surround".



In **Delay Mode**, each node displays a delay for the individual feed. The delay mode allows you to set an individual delay for each matrix node, enabling very complex mixing.



Delay adjustment: Adjust delay time for each feed by click-dragging on the node. Double-click on a node to enter a value from the keyboard.

Delay mode: Choose to display delay values by Time(ms), Distance(m) or Samples. Having applied delay settings to a node and switching back to the Gain mode, will yield a green triangle on the affected node, signifying an active delay value.

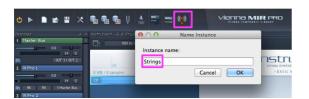


PRESERVE, DECOUPLE, CONNECT AND DISCONNECT – AN OVERVIEW

Preserve

As soon as you connect a Vienna Ensemble PRO instance over network or as a localhost with your sequencer, the Preserve feature is available: Clicking on the **Preserve** icon will keep all samples loaded in this **Vienna Ensemble PRO** instance – and you can switch to another song or even switch to another sequencer without having to reload your samples!

You will be asked to label your preserved Vienna Ensemble PRO instance:





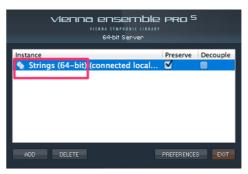
The Preserve Icon will switch to red to indicate the preserved status.



In short: Preserve makes your Vienna Ensemble PRO instance behave like a stand-alone software, although it is still communicating with your sequencer: All data of the given instance is saved with your sequencer project.

The name of the preserved Vienna Ensemble PRO instance will show up in the **Server Interface** in your sequencer and as part of the name shown in the **Vienna Ensemble PRO Server window** for as long as the Vienna Ensemble PRO instance stays preserved, so that you can easily identify it.





As you can see the preserved instance "Strings" is still **CONNECTED** with the song in your sequencer.

As soon as you close your song, the preserved instance will be **disconnected** (the plug icon in the Vienna Ensemble PRO Server window indicates this state as well):



Now you can switch between songs without reloading your template and you can connect to the preserved instance (via the **Server Interface**) and start your work on a new song.

<u>IMPORTANT:</u> Keep the names of your preserved instances consistent – your songs will identify preserved Vienna Ensemble PRO instances by their preserved names. If Song #1 uses "Strings" and you want to connect Song #2 with the preserved "Strings" instance as well, this information will be saved with the song – IF the "Strings" instance is preserved at the time of saving the song. So you have to save the name of the preserved instance with your song in order to automatically connect to it later on.

In other words: Make sure that you save your songs with the correctly labeled preserved instances. If this information is missing, your song will automatically open a new instance, containing the same settings as your already preserved instance, which might lead to confusion.

<u>Try this example yourself:</u> After you have preserved the "Strings" instance and saved your Song #1 and Song #2 with the preserve instance, you can load either Song #1 or Song #2, it will automatically connect to your preserved "Strings" instance.

The name "Strings" is the only indicator that the loaded setup is correct. For safety, your sequencer has also saved all information of the loaded viframe, and when connecting to another *Vienna Ensemble PRO* instance, these data can be loaded or discarded in this instance with the **load/discard plugin data** button.

If you have changed any settings in your template or if you are not sure, please click **Load plugin data**. Your sequencer will "push" the data to your Vienna Ensemble PRO.



If you are sure that your preserved instance contains the settings you need, you can **Discard plugin data**. The arrow will stop blinking after a little while, but the load/discard data option will stay available. You can define a **general preference** on how *Vienna Ensemble PRO* 5 handles incoming project data in the <u>Vienna Ensemble PRO Server General Preferences</u> (page 12).



To **un-preserve** a *Vienna Ensemble PRO* instance, click on the activated **Preserve** icon. Your *Vienna Ensemble PRO* instance will then close when you close your song.



Summary:

Keep the naming convention consistent when working with preserved instances. This will avoid opening additional Vienna Ensemble PRO instances when switching between songs.

Your sequencer saves all project information including the names of your **preserved Vienna Ensemble PRO instances** – if you are not sure that your preserved instance contains all the right settings for your song, choose "load plugin data" after you connect to a preserved instance. Better safe than sorry.

This is a new approach. Give it a test run with a simple setup (Song#1, Song #2) to find out more.

DECOUPLE

This option can be found in the **Server Interface** of each Vienna Ensemble PRO, so it can be applied to each Vienna Ensemble PRO instance individually. The Server Interface manages the connection between your sequencer and the given Vienna Ensemble PRO instance.

Decouple takes your preserved Vienna Ensemble PRO instance one essential step further than Preserve: Now your sequencer does NOT save the information contained in your Vienna Ensemble PRO project anymore, which allows faster saving and loading times with some 3rd party plug-ins, especially with heavy RAM usage. Decouple **ALL** overrides the **DECOUPLE** buttons for all Vienna Ensemble PRO plug-ins in the master host.



Decouple is only available with preserved Vienna Ensemble PRO instances, so that you won't lose important data!

If saving your song does not take long or auto-save does not block your workflow, you will not need to use DECOUPLE.





Don't forget to deactivate DECOUPLE before you save your song. This way all Vienna Ensemble PRO information is stored in your sequencer project as a backup.

<u>Another option for the professionals</u> (if you'd like to keep DECOUPLE activated) is to save your *Vienna Ensemble Pro* instances as **Projects** (*.viframe32/64) or **Metaframes** (*.mframe32/64) before closing your song in the sequencer, or else there is no way to recall the loaded instruments.

This is also a good option to backup your templates:

- *.viframe files contain the data of ONE Vienna Ensemble PRO instance/project (focus on the GUI => File).
- *.mframe files contain the data of all instances saved in a Vienna Ensemble PRO SERVER (focus on the SERVER window => File menu).

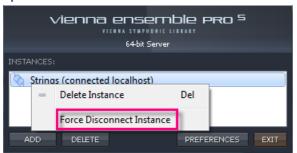
FORCE DISCONNECT

This **emergency option** is useful in case your **sequencer crashes**. In simple terms: In case of a crash, Vienna Ensemble PRO doesn't receive the information that it is no longer connected (if a sequencer crashes, this is an unpredictable event). Your Vienna Ensemble PRO instances stay in a "connected" state (even if they are NOT preserved, like on the right side):





A right-click (OS X: Ctrl+Click) on the instance name in the **Vienna Ensemble PRO Server Window** gives you 2 options: **Delete Instance** or **Force Disconnect instance**





If you forcibly disconnect the instance, unpreserved instances will keep the name they had.





Now you can easily reconnect to your instances without having to reload your samples. Your Vienna Ensembe PRO instances are "normal" preserved instances.

Of course this also works with the **Decouple** option activated.

To forcibly disconnect ALL available instances in a Vienna Ensemble PRO Server, you can use the option **Force Disconnect All** in the **File Menu** of the **Vienna Ensemble PRO Server**.

IMPORTANT NOTES FOR LOGIC USERS



Only applies to LOGIC in combination with Audio/Event Input Plug-ins

Logic's "Live" mode

For proper functionality when using the Audio/Event Input plug-ins in Logic, both the channel that has the main Server Interface plug-in and the channels that have an Audio/Event Input plug-in must be forced into Logic's "Live" mode.

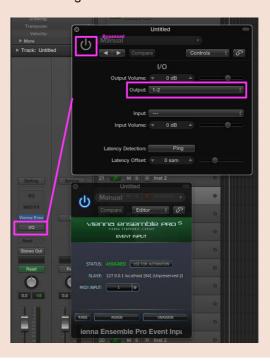
How to force a Logic stereo channel into "Live" mode:

- > Add an insert effect: Utility => I/O
- > Enable its Output
- > Bypass it

Logic 9:



Logic X:





NOTE: Logic channels that are in "Live" mode as well as channels that are connected to those channels will run their processing tasks on a single CPU core.

Automation

If you are using Parameter Automation in Logic: Preferences -> Audio -> General -> "Sample Accurate Automation" needs to be set to "Off" or glitches will occur:

Logic 9:



Logic X:



MULTIPLE MIDI PORTS IN LOGIC PRO X – A DIFFERENT APPROACH

By using the possibilities of the Logic Environment, we found a way to provide you with **multiple MIDI input ports per instance**, as well as the ability to automate parameters from the Server Interface plug-in, without using the **Event Input plug-in**.

This system avoids the "Live" mode and automation workarounds mentioned above, provided no Audio Input plug-ins are used.



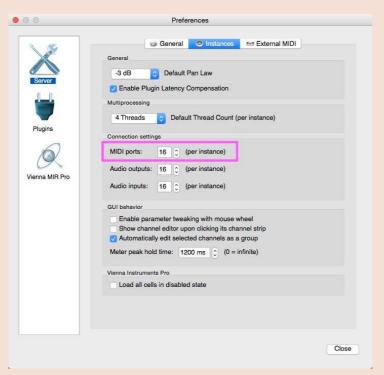
The Multiport Template works best in Logic Pro X 10.1 or higher, as an internal buffer in Logic Pro X was multiplied in this version, which reduces the risks of dropped or hanging notes to a minimum.

Logic Pro X 10.1 requires OS X 10.9.5 (Mavericks) or higher.

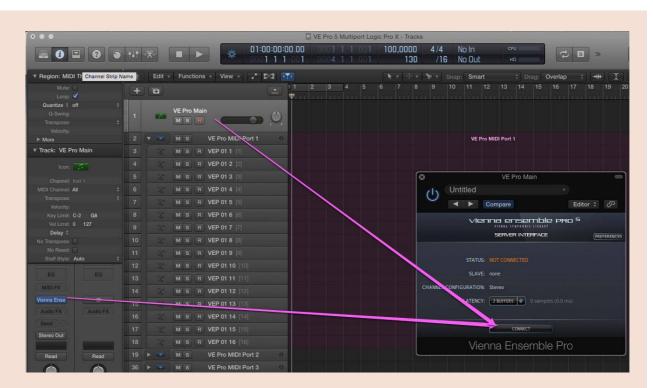
Setup

Download the file VE-Pro-5_Multiport_Logic-Pro-X.zip and unzip it.

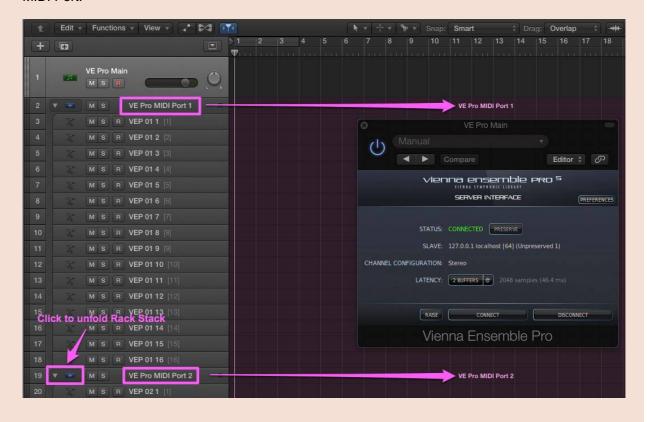
Launch the Vienna Ensemble PRO SERVER and make sure that you have enabled 16 MIDI Ports in the Vienna Ensemble PRO Server Preferences (to make use of all 16 MIDI Ports).



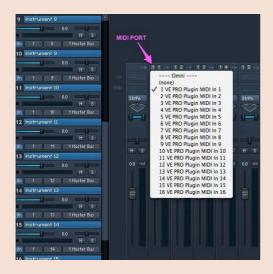
Launch Logic PRO X, load the extracted song "VE Pro 5 Multiport Logic Pro X" and make sure that it is connected to the correct Vienna Ensemble PRO 5 instance.

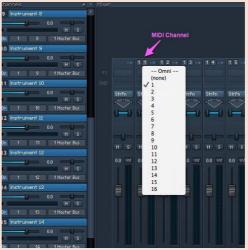


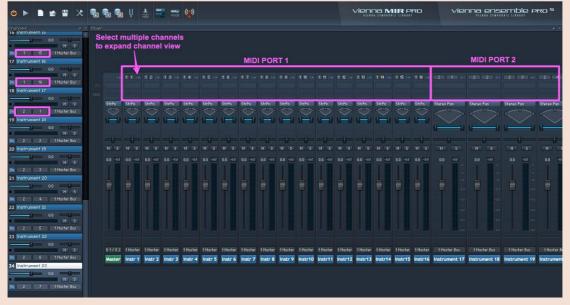
We have set up 256 MIDI Channels for you (16 Ports x 16 MIDI Channels), using the Track Stacks Feature in Logic Pro X, for a better overview. Each Track Stack contains 16 MIDI Channels for each MIDI Port.



In Vienna Ensemble PRO, insert the instrument plug-ins of your choice. Assign the appropriate MIDI PORT and MIDI Channel to each instrument.







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TIPP: If you insert only one MONO-TIMBRAL instrument (like Vienna Instruments), enter the MIDI PORT and MIDI Channel right after you inserted the instruments. The following instruments will have incremented MIDI Channels. Do the same for the following MIDI Ports!



If you are using MULTI-TIMBRAL instruments like KONTAKT, choose OMNI as MIDI Channel.



To take advantage of the multiple ports available with the Multiport Template, you can now merge multiple VE PRO instances to one instance. See Merging existing VE PRO instances.

Parameter Automation in the Multiport Template

Automation can be done from the main Server Interface plug-in channel with this approach, provided that you have **no Audio/Event Input plug-ins assigned to it**.

Press "A" on your computer keyboard to display the Automation parameters and select the parameters from the Parameter Automation menu. Also check <u>Parameter Automation</u>.



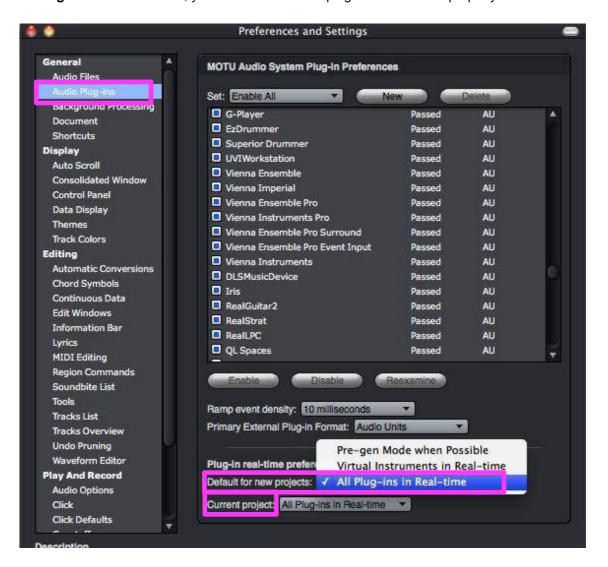


IMPORTANT NOTES FOR DIGITAL PERFORMER USERS

Audio Plug-ins Preferences

In Digital Performer's **Audio Plug-ins Preferences**, choose "**All Plug-ins in Real-time**" as Plug-in real-time preference (default setting and in the current project, see below).

If Pre-gen mode is enabled, your virtual instrument plugins will not work properly.



New Options with MAS Plug-ins

Your newly installed Vienna Ensemble PRO MAS plug-in enables you to utilize mutiple MIDI Ports with each instance of Vienna Ensemble PRO.

With **new projects**, you will automatically have Vienna Ensemble PRO MAS Server Interface plug-ins instantiated in Digital Performer.

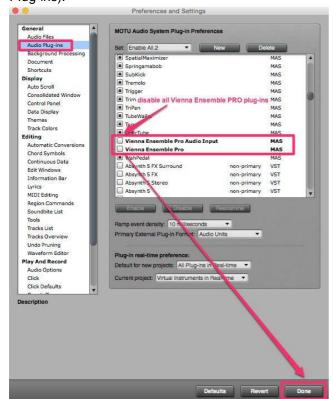
When loading old Digital Performer projects with AU/VST plug-ins of Vienna Ensemble PRO, please check out the next chapter.



The MAS-format will always be the first choice for Digital Performer, so if there is a MAS version of a plug-in available, it will be loaded instead of the available AU/VST plug-in.

Quick Guide - Migration to MAS

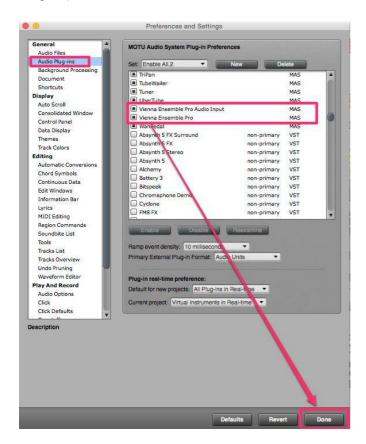
1) Make sure that all Vienna Ensemble MAS plug-ins are disabled in Digital Performer (Preferences => Audio Plug-ins).



- 2) Your songs will load with Vienna Ensemble PRO Audio Unit plug-ins just like before.
- 3) If your VE PRO instances are not preserved yet, **preserve all connected Vienna Ensemble PRO instances** now. You can do that directly in each Vienna Ensemble PRO Server Interface plug-in. For a better overview, choose a **good naming convention** (to reconnect with your MAS plug-in later on).



4) Now **enable the Vienna Ensemble PRO MAS plug-ins** in Digital Performer again (Preferences => Audio Plug-ins).



5) Click **Done** and all Vienna Ensemble PRO AU/VST Server Interface plug-ins will automatically be replaced with the MAS plug-in version (but will not be connected).

6) Connect each Vienna Ensemble PRO MAS Server Interface plug-in with the correct preserved VE PRO instance.





7) Save the song under a new name in Digital Performer and the migration is completed.



To take advantage of the multiple ports available with MAS, you can now merge multiple VE PRO instances to one instance. See Merging existing VE PRO instances.

Working with Audio Input / Event Input plug-ins

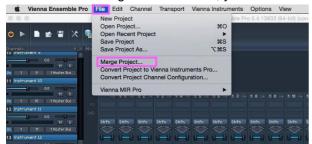
Bouncing (offline rendering) **does not work** when using Audio Unit Event Input or Audio Input plug-ins, but **Freezing** (real-time rendering) **works fine**. As a workaround it is possible to bounce by first freezing and then bouncing the resulting frozen tracks.



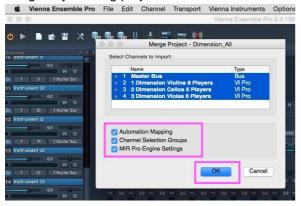
IMPORTANT: This only applies when using the Audio/Event Input plugins in Digital Performer. For regular operation, Vienna Ensemble Pro 5 works as expected, especially when using it as a MAS plug-in with Digital Performer 8.

MERGING EXISTING VE PRO PROJECTS (*.VIFRAME FILES).

To accelerate the creation of your new templates with the Multiport Template for Logic Pro X and with the new MAS version for Digital Performer 8, you can use the MERGE funtion in Vienna Ensemble PRO's FILE menu.



Merge any existing project and choose from the available import options:



After you have merged your projects, please assign the appropriate MIDI Ports and MIDI Channels as well as the Output configuration:

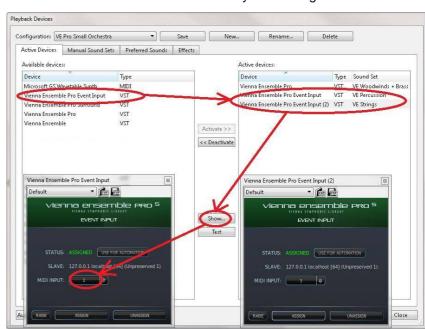


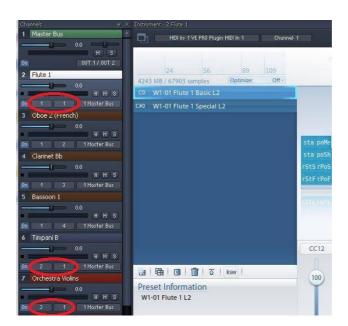
VIENNA ENSEMBLE PRO 5 AND SIBELIUS

For Sibelius users it is now possible to have all loaded instruments in one Vienna Ensemble Pro instance, even if more than 16 instruments and different sound sets are used in one Sibelius Playback configuration.

Any additional Vienna Ensemble instances that might have been needed previously, can now be substituted with the *Vienna Ensemble Pro Event Input Plug-in* which delivers up to 31 additional MIDI ports with 16 channels each.

All instruments are routed to the same Vienna Ensemble Pro instance now. MIDI ports have to be set up in Vienna Ensemble Pro for every instrument, which was not necessary for Sibelius users previously, as there simply was only one available port. Sound sets and the settings on the Manual Sound Sets page have to be configured in the same way as previously.





For further details on how to set up Sibelius and *Vienna Ensemble (Pro)*, please refer to the manual "Optimizing Sibelius Playback", which can be downloaded from MyVSL.

CHANNEL OVERVIEW

MIDI Ports

Each **Vienna Ensemble PRO** instance offers up to 32 MIDI ports with 16 MIDI channels each (= 512 MIDI channels) and a virtually unlimited number of audio ports. You can set the number of ports in the **Server** Preferences of each instance.

The **channel selector** also allows you to choose **omni** to receive on all 16 channels (for multi-timbral instruments like Kontakt, Omnisphere or Stylus), or **none** to temporarily disable MIDI input on that port. If you're running Vienna Ensemble PRO as a plug-in, a dedicated Plug-in MIDI In port will be offered for every Instrument. Used as a VST 3//AAX/MAS plugin, up to 32 ports are available within Cubase, Nuendo, Pro Tools, Sonar and Digital Performer 8.

You can also select **external MIDI Inputs** when using *Vienna Ensemble PRO* as a plug-in.



Assign **2 key ranges** for each virtual instrument, which allows you to create, e.g, full string sections with your desired articulations (even Performance Legatos) – simply assign the same MIDI Channel to all of them and "stack" their keyboard ranges. E.g., you could let the double basses play from B0 to B1, cellos from C2 to B2, violas from C3 to B3, and the violins from C4 to their highest note – just try out what you can do and what makes sense ... You can also let the ranges overlap.

TIP for all Vienna Instruments users: Define the second key range for all layered instruments in the same keyboard area. Then set the keyswitches for all instruments to the same keyswitches within this second key range. This way you can use the same keyswitches to switch between different articulations for all layered instruments.

MIDI Port and **MIDI channel** of each instrument channel are displayed on top of each channel in the mixer and on the Channel Pane. You can also change the settings here.



Plug-in effects

You can assign FX plug-ins to every channel, and you have flexible routing possibilities with assignable Sends. Simply click in the **FX** and **Send Rows** in the mixer.





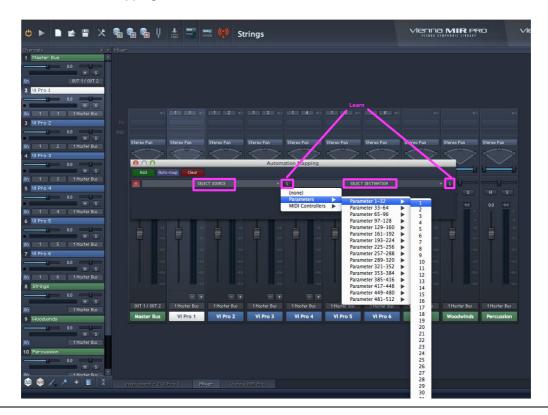
Parameter Automation

All parameters in Vienna Ensemble Pro 5 and its hosted plug-ins are automatable from the master host (512 mappable parameters available), including touch automation. MIDI CC Contol is also possible.



Add a new entry and choose the automation parameter or MIDI CC. You can **add an automation source and destination** by choosing from a list, or use the "**Learn**" buttons to assign any controller in your plug-ins or channels.

Automap converts your older VE PRO 4 automation (so you are fully VE PRO 4 compatible). **Clear** clears all automation mapping entries.



<u>Attention:</u> Vienna Instruments PRO and the original Vienna Instruments only respond to CC automation.

Power panning/Secondary FX Rack

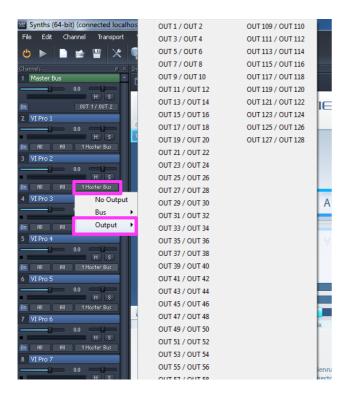
Vienna Ensemble PRO offers two different pan modes: Normal balance, where the volume of the "weaker" channel is lowered correspondingly, and power panning, where you don't lose any stereo information but can narrow or even collapse a channel's stereo signal as desired by dragging the left and right handles. Clicking in the space between the handles or dragging the center dot in the graphic view allows you to move the channel's stereo center.



A right-click takes you to the context menu of this "Post FX Rack". This way you can choose to insert quite some features of MIR PRO (if you have a license available) or alternative FX. More about these options can be found in the MIR PRO User Manual.

Outputs

The **output assignment** offers flexible routing possibilities including all busses – you can assign each channel either to a bus or a hardware output, so that you can set up your mixing console to fit your needs; e.g., you could assign all string instruments to Bus #1, all drums to Bus #2, etc. Of course, changes made in a Bus will affect all channels attached to it.





Each channel has **Mute** and **Solo** buttons as you know them from your sequencer.

MULTI-TIMBRAL PLUG-INS IN VIENNA ENSEMBLE PRO

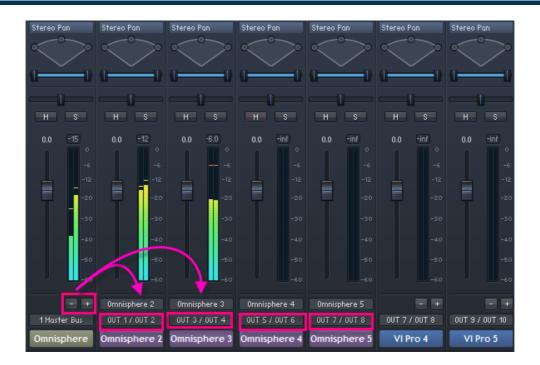
If you are using **multi-timbral plug-ins** like Vienna Instruments PRO, Omnisphere or Kontakt, you can add the available outputs of these plug-ins as dedicated input channels conveniently with the "+/—" Buttons below the volume fader of the instrument track. This way you can send the audio signal back to your sequencer on a separate channel for additional mixing.



Remember that you will need to assign the appropriate outputs WITHIN your multi-timbral plug-in.



Output routing of these additional Audio Input channels is as flexible as any other channel!



VIENNA ENSEMBLE PRO STAND-ALONE

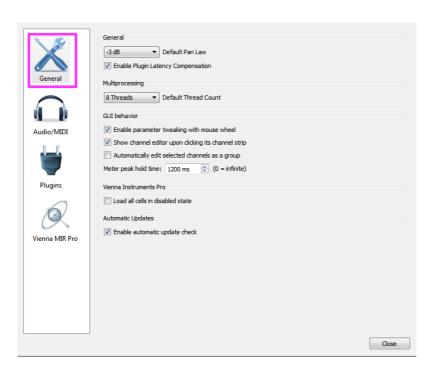
Vienna Ensemble PRO can be used as a plug-in, conveniently integrated in your setup over a GigaBit LAN connection, or as a stand-alone software. To launch Vienna Ensemble PRO as stand-alone software, double-click **Vienna Ensemble PRO** or **Vienna Ensemble PRO** (64-bit) from your programs/applications.

Preferences

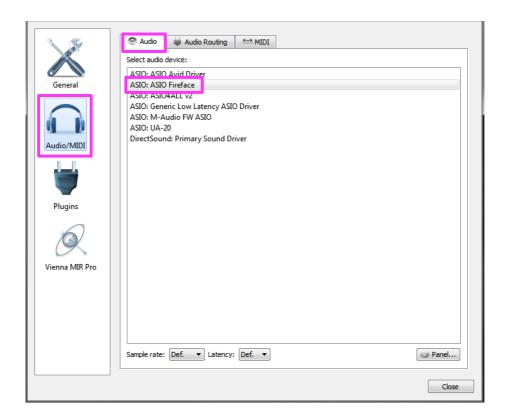
Click on the **Preferences** icon in the task bar to configure your stand-alone setup. The first start will automatically open the Preferences.



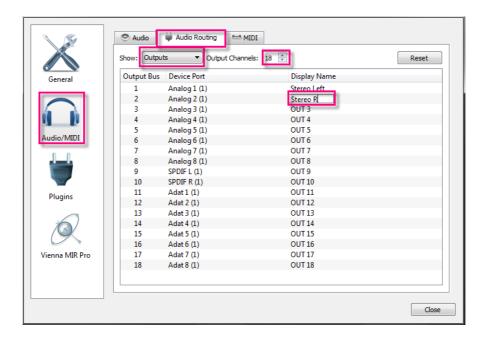
The **General Preferences** for your stand-alone Vienna Ensemble PRO differ just a little from the Preferences described in the <u>Vienna Ensemble PRO Server Preferences (Instances)</u>.



Select your Audio Device:



The **Audio and MIDI Routing** can be configured, you can add and deactivate outputs/inputs and **assign names** for a better overview. The **activated inputs of your soundcard** will also be available in the **Input Channels** within Vienna Ensemble PRO.



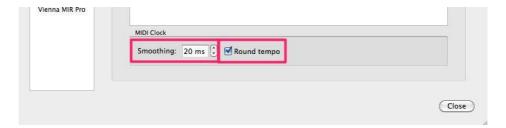
WINDOWS: Select active channels of an audio device to improve communication with other audio applications. Audio channels of the same audio device can be used by another audio application when deactivated in the **Vienna Ensemble PRO** Preferences.

MIDI: Select your MIDI Input Devices for this Vienna Ensemble PRO stand-alone instance.

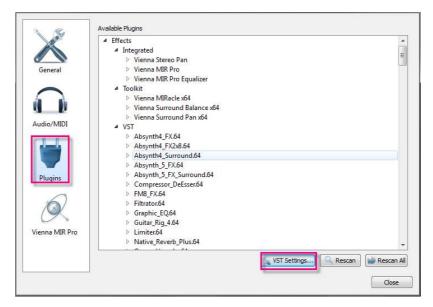


Smoothing: Sets the amount of smoothing applied to the tempo when synchronized to MIDI Clock. Ranges from 0 to 40 ms. Defaults to 20 ms.

Round tempo: When enabled, rounds the tempo to integer values (so for instance 120.2 becomes 120, 140.7 becomes 141, and so forth), which generally results in less tempo jitter at the expense of possible tempo drifting. Enabled by default.



Plug-ins: In **OS X**, all installed AU plug-ins are displayed here. In **Windows**, make sure that you have assigned the correct **VST plug-in path**, so that *Vienna Ensemble PRO* can find all your plug-ins!



The Vienna MIR Pro Settings are only available if a license for MIR PRO is available. Please consult the MIR PRO manual for more information.

SHORTCUTS AND SPECIAL FEATURES

Shortcut List for Windows

- [CTRL+R] Start/Stop Engine
- [CTRL+O] Open Project
- [CTRL+S] Save Project
- [CTRL+Alt+S] Save Project as...
- [CTRL+P] Preferences does not work in server mode
- [ESC] Toggle Mixer View
- [CTRL+Q] Quit
- [CTRL+Z] Undo
- [CTRL+Y] Redo
- [CTRL+N] Add Instrument
- [CTRL+I] Add Input channel
- [CTRL+B] Add Bus
- [CTRL+D] Duplicate Channel
- [Del] Delete channel(s)
- [F] Fold channel strips (Channel Pane)
- [PgUp] Previous Channel
- [PgDn] Next Channel

Shortcut List for OS X

- [Command+R] Start/Stop Engine
- [Command+O] Open Project
- [Command+S] Save Project
- [Command+Alt+S] Save Project as
- [Command+P] Preferences does not work in server mode
- [ESC] Toggle Mixer View
- [Command+Q] Quit
- [Command+Z] Undo
- [Command+Y] Redo
- [Command+N] Add Instrument
- [Command+I] Add Input channel
- [Command+B] Add Bus
- [Command+D] Duplicate Channel
- [<-] Delete channel(s)
- [F] Fold channel strips (Channel Pane)
- [PgUp] Previous Channel
- [PgDn] Next Channel

Special Features Channel Pane

- Rubber-band Selection of channels
- Browsing channels with Pgup / PgDn and Arrow up / Arrow down
- Selection of multiple channels with [Shift/Ctrl+Click]
- Dragging of channels (drag on titlebar)
- Right click on a channel strip for a menu of actions
- Hold down [Alt] while selecting a MIDI channel and the MIDI channels of all selected channels will be automatically incremented.
- Select multiple instruments and hold down [Alt] while changing MIDI port or channel this value will
 propagate to all selected channels
- Hold down [Shift] while selecting a MIDI Channel and all selected channels will get the same value
- Holding SHIFT when inserting/removing plug-in will apply to the same insert slot on ALL tracks.
- Holding ALT when inserting/removing plug-in will apply to the same insert slot on SELECTED tracks.
- The same applies to Bypass. (Shift-Ctrl-Click applies to all, Alt-Ctrl-Click applies to selected tracks).
- Moving a plug-in BETWEEN two insert slots will create a complete new row of insert slots.
- When a row gets empty, the view will be optimized (the row will be removed).

Special Features Mixer

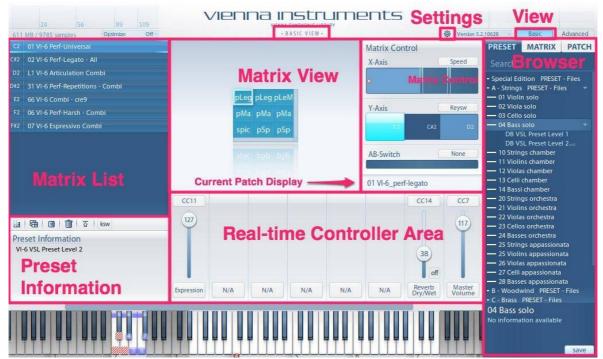
- · [Shift]-drag any control for fine adjustment
- [Shift]-mouse-wheel any control for fine adjustment
- Selection of channels with [Shift/Ctrl]-click
- Rubber-band selection of channels
- Double-click channel name to open instrument GUI (if available)
- [Ctrl]-click on the channel strip fold button to fold all mixer-strips
- Right-click on the channel strip for a menu of actions (like in the Channel Pane)
- Select multiple channels, hold down [Alt] while adjusting volume or pan, and all selected channels will be adjusted
- Hold down [Alt] while selecting a MIDI channel and the MIDI channels of all selected channels will be automatically incremented
- Hold down [Shift] while selecting a MIDI channel and all selected MIDI channels will get the same value

VIENNA INSTRUMENTS (PRO)

Your **Epic Orchestra** and all other Vienna Instruments Collections are powered by **Vienna Instruments** (and **Vienna Instruments PRO**), our tailor-made sample player that is loaded with features!

The **Basic View** (see below) displays all parameters you need when playing live.

Check out all the features shown below and the **Advanced View** in the *Vienna Instruments* manual! All widgets come with **Tool Tips**, so you get instant information when you hover over each widget with your mouse.



Please refer to the **Vienna Instruments Manual** in <u>MyVSL</u> (Software Manuals) to find out more about the intricacies of this powerful tool.

Additionally, we have provided <u>Video Tutorials</u> that will give you a quick start with simple examples that cover all the features of Vienna Instruments.



Vienna Instruments and Vienna Instruments PRO need to be installed separately to be available in Vienna Ensemble PRO 5.



TIP: Vienna Instruments PRO provides you with even more options when it comes to manipulation of virtual instruments (integrated APP Sequencer, enveloped time-stretching, SSD-ready, which gives you a 10 times faster loading process....).

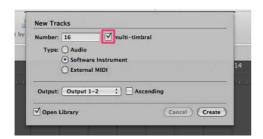
VIENNA ENSEMBLE PRO ROUTING

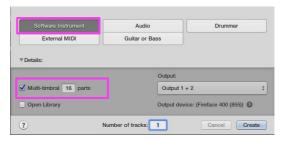
This chapter will show you how to route multiple stereo outputs from Vienna Ensemble PRO into your sequencer.

Logic 9 / Logic X

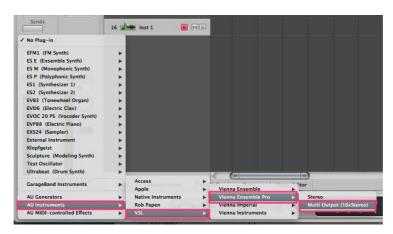
Start the Vienna Ensemble PRO SERVER (32 and/or 64 bit).

Then, instantiate a multi-timbral Software Instrument track:



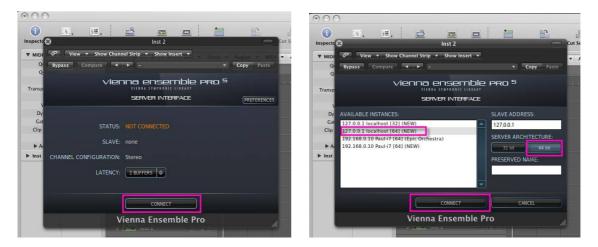


Assign Vienna Ensemble PRO (Multi Output).

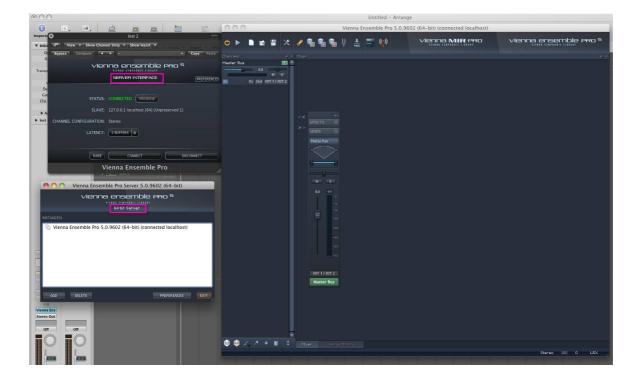




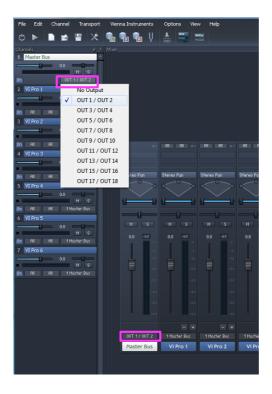
The Server Interface opens – click "Connect" and choose the Vienna Ensemble PRO instance of your choice.



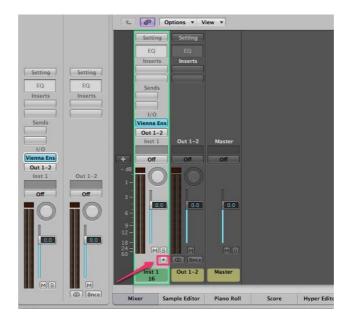
The windows you see now are the Vienna Ensemble PRO Server Interface, the Vienna Ensemble PRO Server and the Vienna Ensemble PRO GUI.

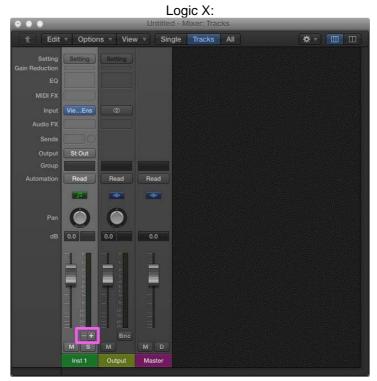


Now you can assign different outputs in Vienna Ensemble PRO. It is also possible to assign the outputs below the fader of each channel.



Open the Mixer page. Outputs 1–2 are automatically assigned in the Audio Instrument channel. Logic 9:

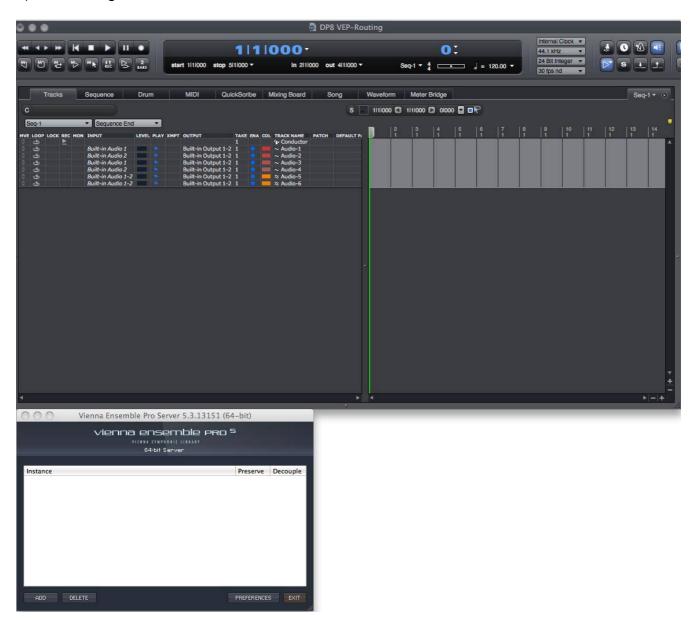




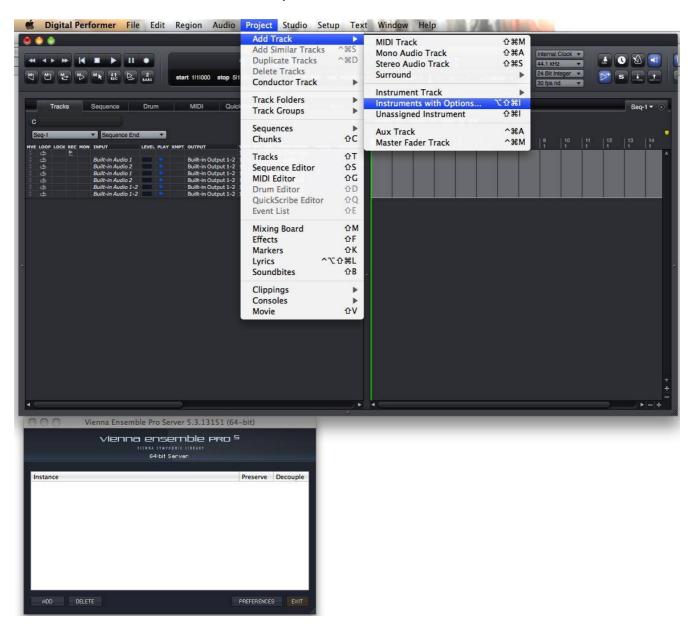
You can add more stereo channels in ascending order comfortably by simply clicking the "+" Button underneath the SOLO button in the Instrument channel.

Digital Performer

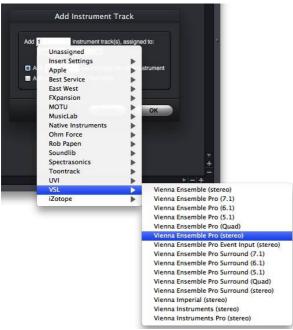
1) Launch Digital Performer and Vienna Ensemble PRO Server



2. Add a new Instrument Track with Options.

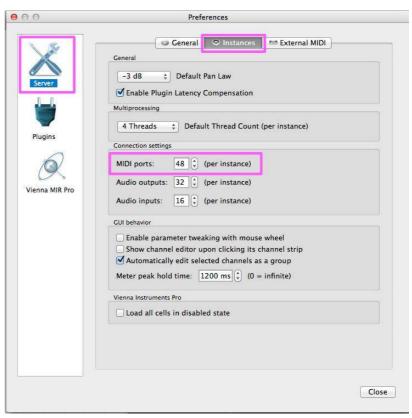


3. Assign it to Vienna Ensemble PRO (stereo)

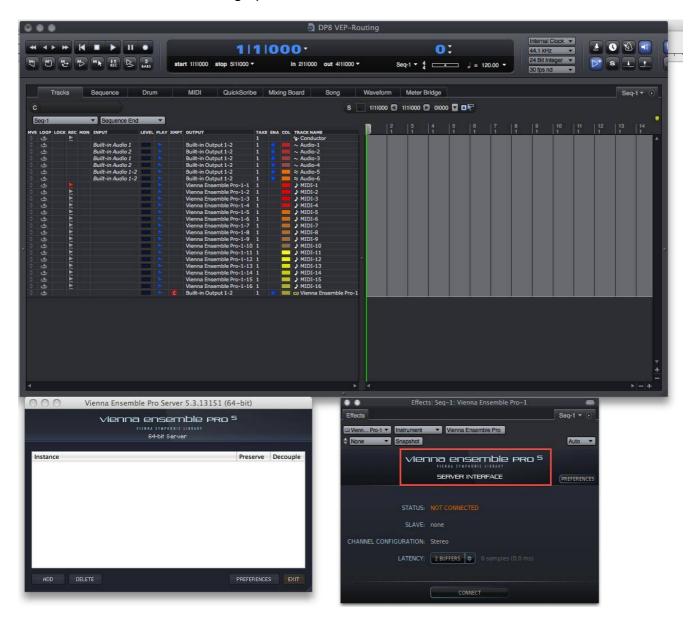


4. Add 16 MIDI tracks. If you are using VE PRO as a MAS plug-in in Digital Performer 8, you can get up to 768 (48 x16) MIDI Channels, as you can use up to 48 MIDI Ports per instance, depending on your settings in the VE PRO Preferences!

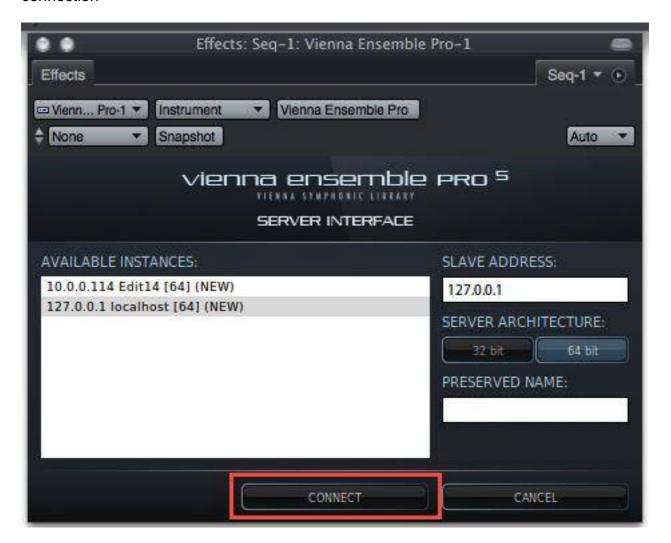




5. Click on OK - this is will bring up the Vienna Ensemble PRO Server Interface

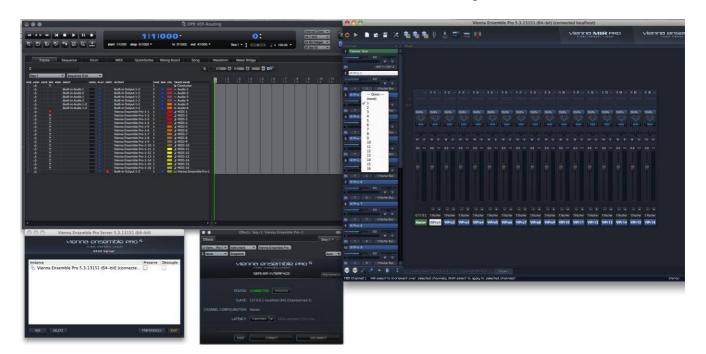


6. Click on Connect, select a Server IP from the list of available Servers and confirm the connection

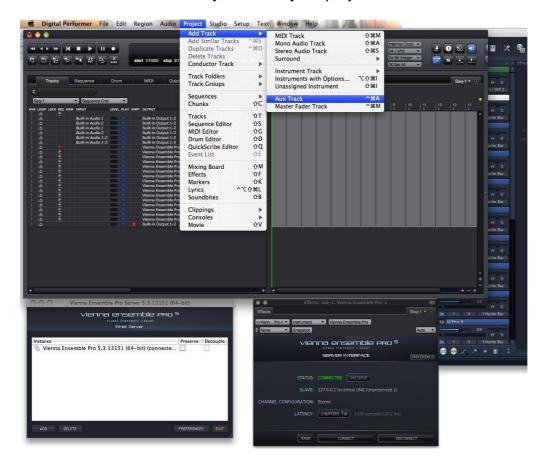


7. The windows you will see now are the Vienna Ensemble PRO Server Interface, the Vienna Ensemble PRO Server and the Vienna Ensemble PRO GUI.

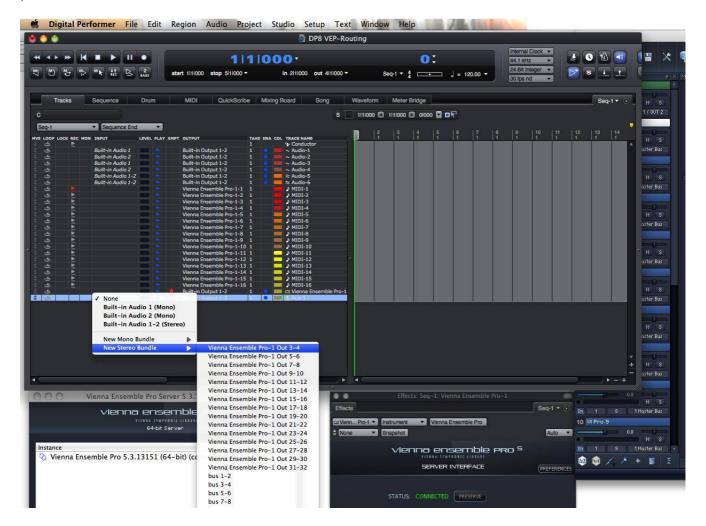
Create Instrument Channels in Vienna Ensemble PRO and assign MIDI channels to them



8. Add one or more auxiliary tracks to your project



9. You can now check the available Stereo Outputs of Vienna Ensemble PRO in the inputs of your Aux Track.

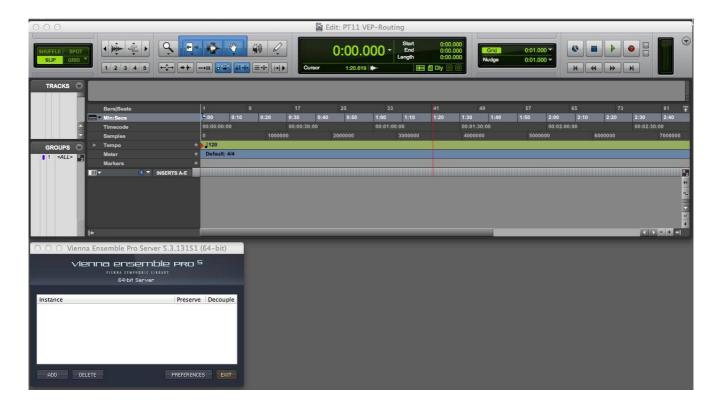


10. Assign the different outputs in Vienna Ensemble PRO. It is also possible to assign the outputs below the fader of each channel.



Pro Tools

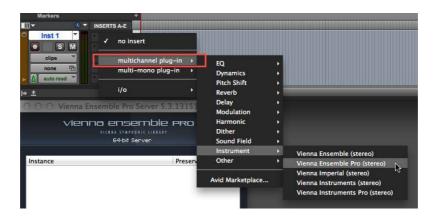
1) Start Pro Tools and the Vienna Ensemble PRO SERVER (32 and/or 64 bit).



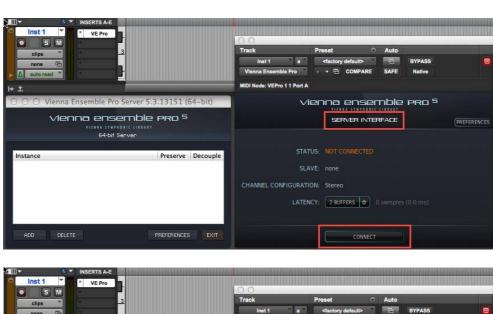
2) Then, create a Stereo Instrument track.

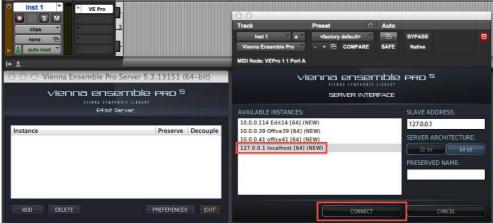


3) Assign the Vienna Ensemble PRO as a multi-channel plug-in.

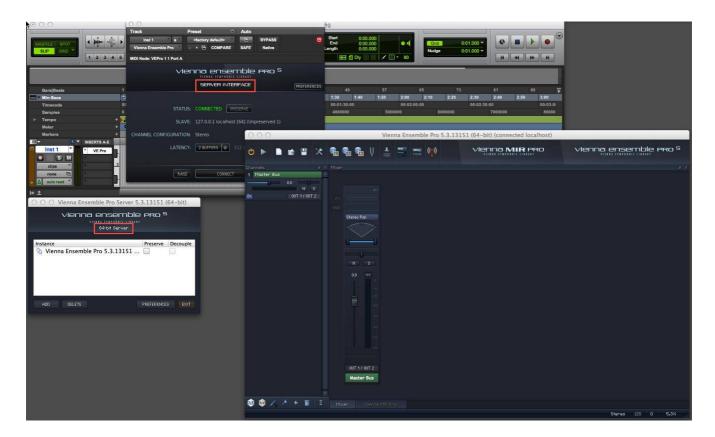


4) The Server Interface shows up – click "Connect" and choose a Vienna Ensemble PRO instance.





5) Vienna Ensemble PRO will launch in the background. You see the Server Interface, the 32-bit Server and Vienna Ensemble PRO itself.



6) Create new MIDI tracks as needed. With RTAS/AAX, the amount of MIDI ports can be set in the **Vienna Ensemble PRO Server** Preferences.



7) In the mixer, assign the MIDI channels to Vienna Ensemble PRO.



8) Now, create an Aux track and as many Stereo Aux Inputs as you will need.



9) Assign the Vienna Ensemble PRO outputs to the inputs of your Aux track.

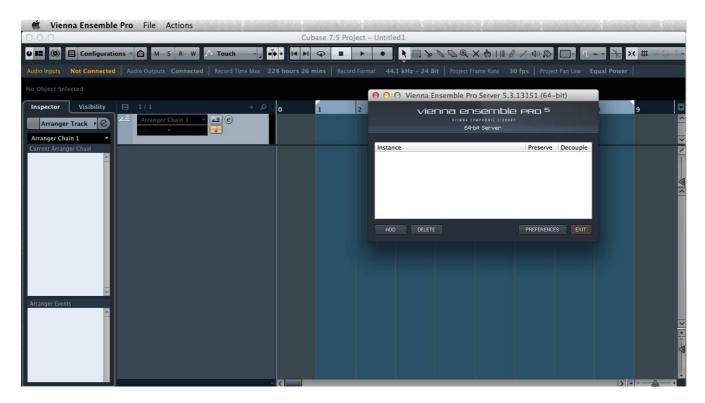


10) Assign the different outputs in Vienna Ensemble PRO. It is also possible to assign the outputs below the fader of each channel.

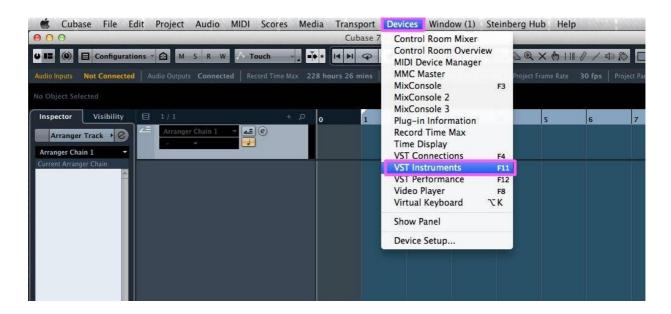


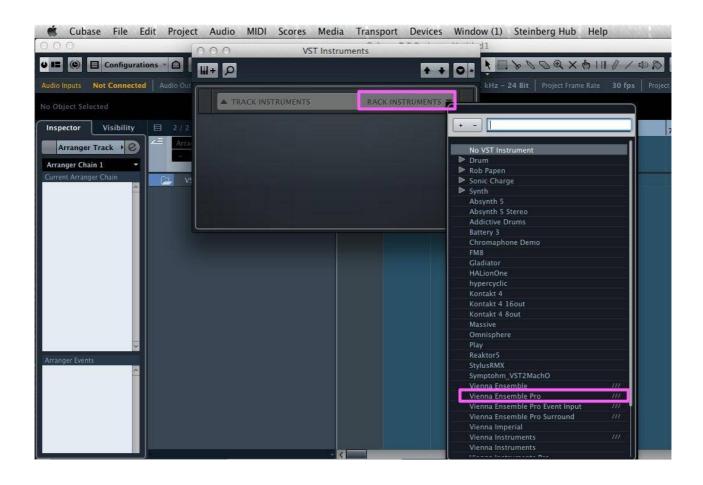
Cubase

1) Start the Vienna Ensemble PRO SERVER (32 and/or 64 bit).



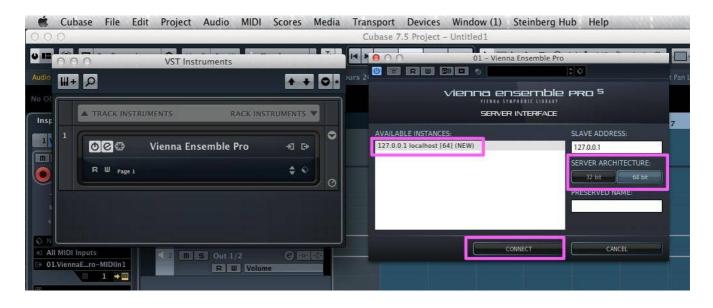
2) Instantiate Vienna Ensemble PRO as a VST or VST3 Instrument (///), ideally as a RACK instrument.





3) Vienna Ensemble Server Interface opens up – Click "Connect" and choose the Vienna Ensemble PRO instance of your choice (remember that you have to start Vienna Ensemble PRO SERVER first!).

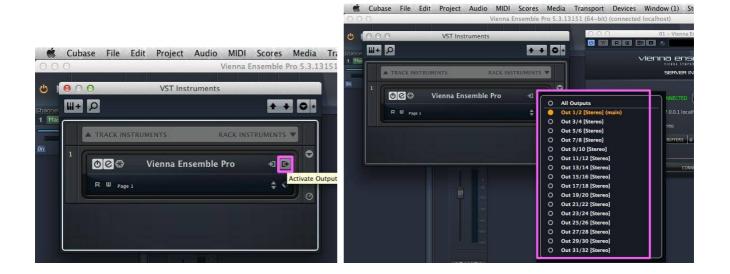






4)The windows you see are the Vienna Ensemble PRO Server and the Vienna Ensemble PRO GUI. If you open the plug-in, the Server Interface will open again.

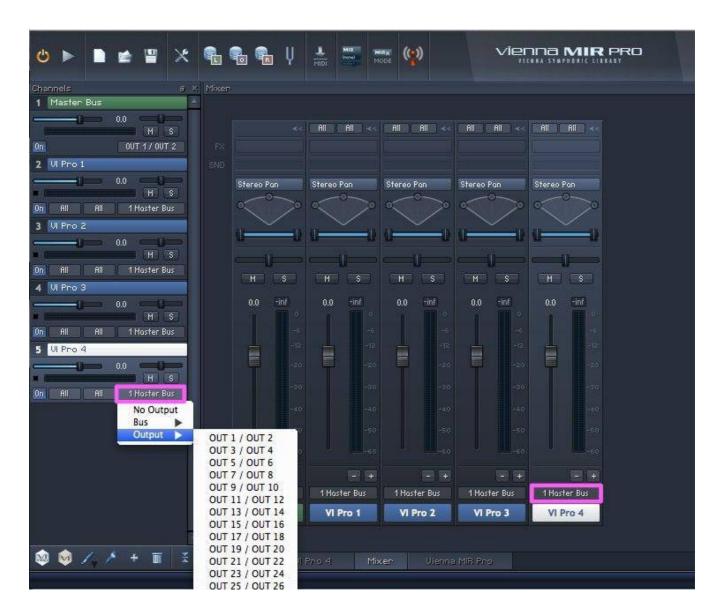
Click on the sign to the far right of "Vienna Ensemble PRO" to activate the available Vienna Ensemble PRO outputs. You can activate them separately or one by one, depending on how many you need.



5) The corresponding stereo channels will be created automatically in your mixer.



6) Assign the different outputs in Vienna Ensemble PRO. It is also possible to assign the outputs below the fader of each channel.

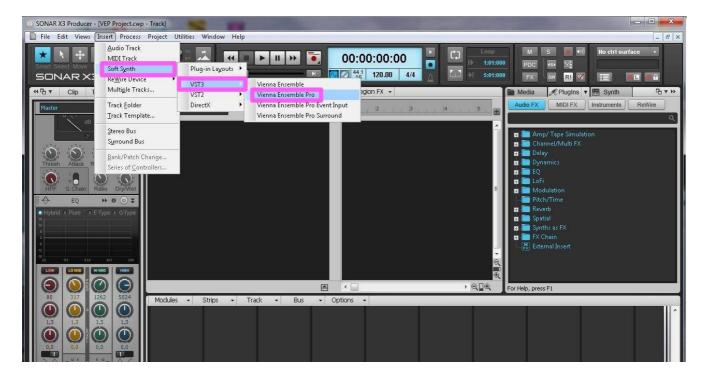


Cakewalk SONAR X3

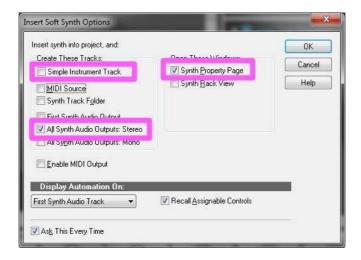
1) Launch Vienna Ensemble PRO Server 5 so that it is ready for you to connect to.



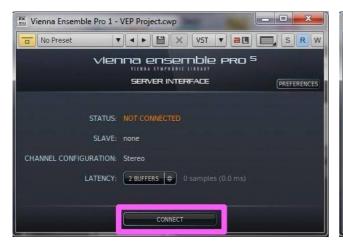
2) Create a new Vienna Ensemble PRO Instance by selecting "Insert → Soft Synth" →VST3 in the top menu bar. Please note that the exact plugin folder name may differ depending on where Vienna Ensemble PRO is installed.



3) The following dialog will appear. Depending on whether you wish to have multiple outputs (for mixing instruments inside SONAR) or a single stereo output (for mixing instruments inside Vienna Ensemble PRO), please choose the appropriate option as well as the option to display the "Synth Property Page", and click OK.

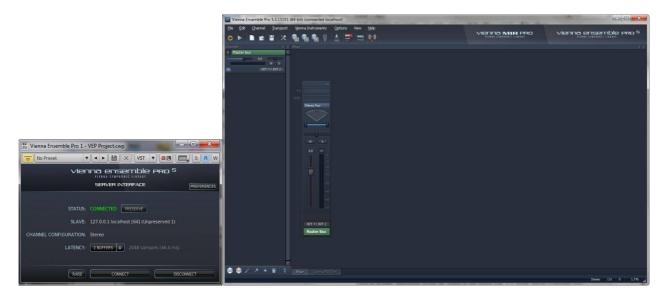


4) The Server Interface will appear – click "Connect" and choose a Vienna Ensemble PRO instance.





Vienna Ensemble PRO will launch in the background. You will see the Server Interface, the 32/64-bit Server and Vienna Ensemble PRO itself.



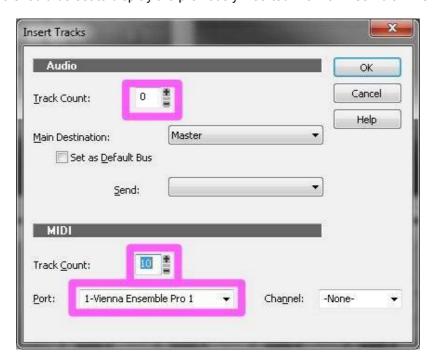
5) Now when you insert buses and instruments and assign outputs in the Vienna Ensemble PRO Instance, they will route to the previously created tracks in SONAR. For using only a single stereo track in SONAR, everything should be routed to the output pair 1/2 inside Vienna Ensemble PRO.



6) You will need to insert MIDI tracks (as many as you need) into the SONAR project. To do so, please select "Insert → Multiple Tracks":



7) Please set the audio track count to 0 and the MIDI track count to as many tracks as there are necessary to create. The 'Port' should be set to display the previously inserted Vienna Ensemble PRO synth instance.



8) For the newly inserted tracks you will need to pick MIDI channels. Please select "I/O" in the track options display first.



9) If the view is shorter than on the picture below and doesn't show MIDI channel [C] combo boxes, then please resize it horizontally to be wider. After this, select the desired MIDI channels.



I have chosen channels 1...16 for the MIDI tracks and also given the tracks different names.



10) Finally, route the proper MIDI channel from the Vienna Ensemble PRO instance to SONAR:



11) Your environment is ready to go! You should have complete synchronization between SONAR and Vienna Ensemble PRO. If you need to repeat these steps too often, we recommend saving the above setup as a starting point and using it as a project template.

Presonus Studio One

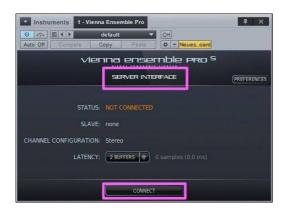
1) Launch Vienna Ensemble PRO Server (32 and /or 64 bit) so that it is ready for you to connect to.



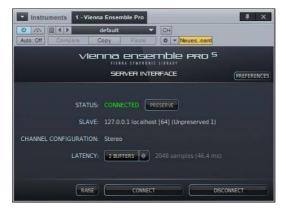
2) Create a new Vienna Ensemble PRO Instance by dragging and dropping the desired instrument from the instruments menu on the right to the arrange window on the left:



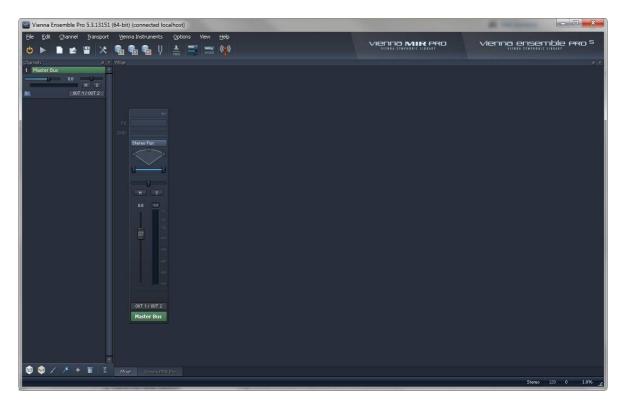
3) The Server Interface will appear – click "Connect" and choose a Vienna Ensemble PRO instance.



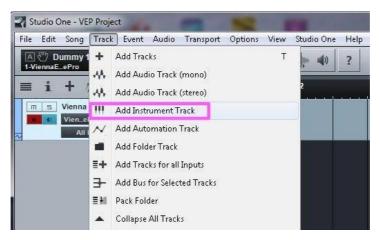




4) Vienna Ensemble PRO will launch in the background. You will see the Server Interface, the 32/64-bit Server and Vienna Ensemble PRO itself.

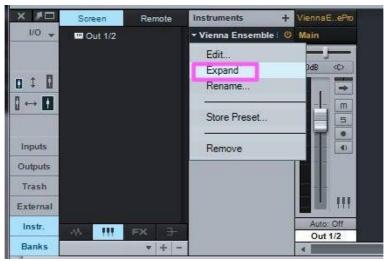


5) Create as many MIDI (instrument) tracks as you need in Studio One.

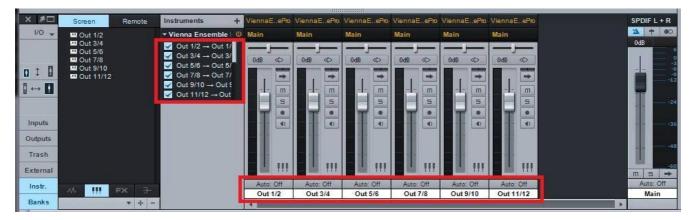


6) Open the mixer page. Outputs 1–2 are automatically assigned to your Vienna Ensemble PRO instance. You can expand these available outputs by clicking the down arrow on Vienna Ensemble and choosing "Expand". If you want to use only a single stereo channel in Studio One and mix the instruments inside Vienna Ensemble PRO, everything should be routed to the output pair 1/2 inside Vienna Ensemble PRO. In this case you can leave out steps 7 and 8.

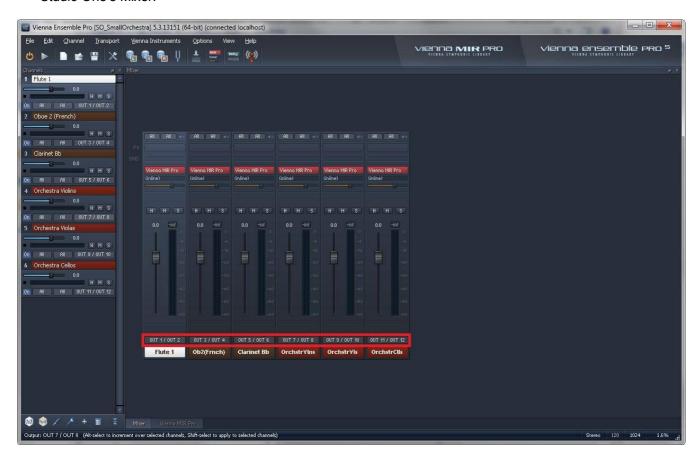




7) Now you can click on all the available 32 outputs and choose the ones you need. As you click the boxes to add outputs, channels are automatically created for you in the mixer window:

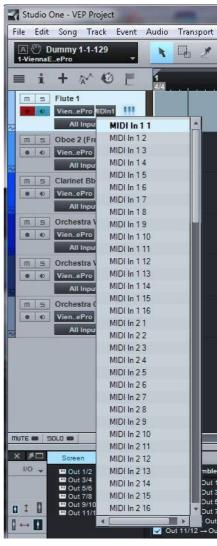


8) Now when you assign outputs in the Vienna Ensemble PRO Instance, they will route to these channels in Studio One's Mixer:



9) Now you need to assign MIDI outputs, ports and channels to the tracks in your arrangement.





10) Finally, set the same MIDI Ports and channels in your Vienna Ensemble PRO instance:



11) Your environment is ready to go! You should now have complete synchronization between Studio One and Vienna Ensemble PRO.

GLOSSARY

Channel Preset: Saves all settings of a Vienna Ensemble Pro Channels (FX, Routing, Panning, Outputs...). **Channel Set**: Multiple Channel Presets – a Channel Set can be saved and loaded in the Channel menu

Connect/Disconnect: These options are activated on the Vienna Ensemble PRO Server Interface. You can connect to any Vienna Ensemble PRO Server available in your network.

Decouple: This option is activated on the Vienna Ensemble PRO Server Interface. When decoupled, the viframe data is NOT saved or loaded with the sequencer project. This can result in a more efficient workflow.

Directory Manager: Shows the Sample Content of your Vienna Instruments Collections and connects it with your software.

eLicenser Control Center: Manages the licenses of your Vienna Symphonic Library products.

Epic Orchestra: 7 GB Orchestral Pack, comes with Vienna Ensemble PRO.

Force Disconnect: When your sequencer crashes, you can forcibly disconnect your Vienna Ensemble PRO instances – this brings them into a preserved state and you can easily reconnect to your project without having to reload all your samples. Emergency Option only!

LAN Connection: Local Area Network. Connects your computers via a Gigabit Ethernet cable.

Master Computer: Hosts your sequencer, running the Vienna Ensemble PRO Server Interface and possibly Vienna Ensemble PRO Server (as localhost).

Multi-timbral virtual Instruments: All virtual instruments that offer more than 1 MIDI Channel.

Preserve: Keeps all samples load in the preserved Vienna Ensemble PRO instance loaded. You can switch between songs without reloading your templates.

Slave Computer: Hosts Vienna Ensemble PRO Servers, connected via LAN.

Vienna Ensemble PRO Server Interface: Connects with the available Vienna Ensemble PRO Servers in a network over LAN, the Server Interface works as AU/VST/VST3/RTAS/AAX/MAS plug-in. Connect, disconnect, decouple and show Vienna Ensemble PRO instances in the Server Interface.

Vienna Ensemble PRO Server Window: Displays all available instances and their status.

Vienna Ensemble PRO Server: Available in 32-bit and 64-bit. The backbone of Vienna Ensemble PRO. Must be launched in order to be connected with the Vienna Ensemble PRO Server Interface.

Vienna Ensemble PRO Stand-alone: The basic form of the software, connected the old-fashioned way.

Vienna Instruments: The tailor-made sample player for Vienna Instruments Collections. Implemented in Vienna Ensemble PRO.

ViennaKey: Contains the licenses of your Vienna Symphonic Library products.

SUPPORT, QUESTIONS, VIDEOS, FORUM ...

We hope that this introduction to Vienna Ensemble PRO 5 was a helpful companion during your first steps with our new mixing and host software and wish you many joyful hours of composing and inspiration! If you're not familiar with the Vienna Instruments included in Vienna Ensemble PRO 5, or just want to make sure, please have a look at the **Vienna Instruments Manual** and the **video tutorials** on our website! And if they don't provide the information you need, please feel free to post your questions in our <u>Forum</u>, or send an e-mail to our <u>support team</u>.

We wish you a great time with Vienna Ensemble PRO!

Enjoy!

Your Vienna Symphonic Library Team